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ABSTRACT

Outlines are presented for the courses that make up the three-tiered general education program at Los Medanos College. Part 1 provides background on the Los Medanos model and includes a position paper on the criteria and format for a Tier I course. Part 2 provides outlines for Tier I courses, which focus on providing a breadth of knowledge in six curriculum areas (i.e., behavioral, biological, physical, and social sciences; humanistic studies; and language arts). Part 3 contains the outline for the Tier II course, in which an interdisciplinary approach is used to investigate five major societal issues, such as "Energy and Ecology," "The Limits of Growth," and "Nuclear War and Other Nuclear Threats," which vary from year to year. Part 4 provides guidelines for the Tier III courses, which involve an in-depth ethical inquiry into a single societal issue, and presents outlines for courses entitled "Control of Life and Death," "Freedom and Responsiblity of the Mass Media," "Science and Human Values," and "Change: A Look to the Future." The course outlines include a catalog description; an overview and rationale; course-content and criteria-related goals; and evaluation, grading, and other course policies. (HB)

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GENERAL EDUCATION COURSE OUTLINES: TIERS I, II, III OF THE LOS MEDANOS COLLEGE GENERAL EDUCATION PROGRAM

To accompany the Final Report to the National Endowment of the Humanities for a Project Entitled: An Implementation Project to Complete the Integration of an Interdisciplinary General Education Model Predicated on Certain Humanistic Assumptions

LOS MEDANOS COLLEGE

Pittsburg, California

May, 1983

JC 830 352

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FINAL REPORT TO THE NATIONAL ENDOWMENT FOR THE HUMANITIES

Project Title

AN IMPLEMENTATION PROJECT TO COMPLETE THE INTEGRATION OF AN INTERDISCIPLINARY GENERAL EDUCATION MODEL PREDICATED ON CERTAIN HUMANISTIC ASSUMPTIONS

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May, 1983

LOS MEDANOS COLLEGE

GENERAL EDUCATION COURSE OUTLINES

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1. INTRODUCTION

1.1 Background

This volume brings together outlines for the courses that make up the three tiered general education program at Los Medanos College. Course outlines for Tier I were developed during the period July, 1981 to February, 1983, with the support of an implementation grant from the National Endowment for the Humanities. Course outlines for Tier II and Tier III were developed with the support of an earlier, pilot grant from the National Endowment for the Humanities.

The general education program is an integral component of the educational plan at Los Medanos College. Courses are integrated within and among the three tiers. A brief description of each tier follows. After the descriptions, a chart showing the relationship of the tiers is given.

Tier I. The Breadth of Knowledge. All courses in this area have an "L" after the course number designation in the LMC Catalog and Schedule of Classes, indicating that the nine general education criteria listed under Tier I on the chart have been incorporated within the course. A limited number of courses in the six curricular areas make up Tier I. By taking these courses, students will acquire a breadth of knowledge. These courses lay the foundation that students will need to master in order to take the "capstone" courses offered in Tiers II and III.

Tier II. Humanistic Studies 2LS: An Ethical Inquiry Into Societal Issues. This is the one course that must be completed by all students who plan to graduate and/or transfer. An interdisciplinary approach is used to investigate five major societal issues, such as "Energy and Ecology," "The Limits of Growth," "The Population Explosion," "Nuclear War and Other Nuclear Threats" and "Equality and Justice by Sex and

Race." These issues may vary from year to year depending on current relevance.

In each case, students learn the dimensions or the severity of the problem, consider the options for dealing with it, explore the potential consequences of each option and inquire into the ethics involved in the choice of action.

To help students "learn how to learn," there is a self-directed study (SDS) component built into the course. Each student is obliged to select a topic of personal interest directly relative to one of the units being examined, set study goals, design and follow a plan of investigation, analyze the ethical issues involved, and finally, prepare a written report of their individual study.

Tier III. The 3LS Courses, An Ethical Inquiry into a Societal Issue. This second "capstone" course offers students the option of concentrating their study on one of several societal issues offered in each of the six curricular areas. Among these are Language Arts 3LS: "Freedom and Responsibility of the Mass Media," Physical Science 3LS: "Fossil to Fission: The Energy Story," Social Science 3LS: "Change, A Look to the Future," Biological Science 3LS: "Death and Dying," and Humanistic Studies 3LS: "The Threat of Nuclear War."

These courses are interdisciplinary and take students through the content by a method of ethical inquiry that encourages them to look at the ethics as well as the available facts of the issues being studied.

This course, like Humanistic Studies 2LS, teaches the skills of self-directed study (SDS). These skills, while helping them learn about the issue they have selected, will help them throughout their lives in investigating the complex moral, economic and social issues they will face in tomorrow's world.

1.2 Tier One Position Paper

Those criteria that must be satisfied for a course to qualify as a Tier I general education course and how the process of applying the criteria and judging if a proposed course satisfies the criteria were set out in a position paper developed by the Tier I Study Group in Fall, 1981. During the Spring and Fall, 1982, course outlines were rewritten and judged against the criteria. The Tier I course outlines included in this volume have been written to the specifications of the criteria, judged, approved, and incorporated into the general education curriculum. Following now is the position paper. In the Los Medanos College governance plan, a position paper is the means by which ideas are developed, debated, evaluated and voted upon, and entered into college policy.

A POSITION PAPER
TIER I CRITERIA AND
PROCEDURES FOR APPLICATION

December 1981

GENERAL EDUCATION TRANSFER COURSES Tiers I, II, and III 26-30 Units

TIER I

Tier I requires that students attain 20-24 units by completing a minimum of 1 course in each of the following areas:

Behavioral Science	Social Science	Biological Science	Physical Science	Language Arts	Humanistic Studies
Anthropology	Economics	Biology and Health	General Physical Science	Mass Communication	Visual Arts
Psychology	Geography	Biology	Physics	Nature of Literature	Music
Sociology	History	Ecology	Chemistry	*	Philosophy
*	*	*	Astronomy	*	*

In addition to their academic content, these courses must meet the following criteria as part of their inclusion in the General Education Breath Requirement:

Interdisciplinary • Modes of Inquiry • Aesthetics of Knowledge • Implications of Knowledge • Reading and Writing Assessment
Effective Thinking • Creativity • Pluralism

TIER II

Tier II requires that students complete **Humanistic Studies 2LS: An Ethical Inquiry into Societal Issues**, an interdisciplinary course of 3 units in which ethical inquiry is the mode of instruction. A minimum of 5 societal issues are explored, and a study project is required. For more detail, see the panel to the right.

TIER III

Tier III requires that students complete a 3LS course in one of the 6 areas listed above. These 3-unit courses are interdisciplinary in nature, designed as in-depth critical inquires into one selected issue. For more detail, see the panel to the right.

BASIC SKILLS and PROFICIENCIES 5-12 Units

REQUIREMENTS

Language Arts 10S: College Composition	3 Units
Language Arts 20S: Critical Reading and Composition	Proficiency Test **or** 3 Units
Mathematics 10: Applied Mathematics	Proficiency Test **or** 3 Units
Computer Literacy	Proficiency Test **or** 2 Units
Physical Education: Activity Courses	2 Units

MAJOR and ELECTIVE COURSES 18 Units

REQUIREMENTS

Majors: A student needs to complete a minimum of 18 units in a major with a minimum 'C' average in one of our vocational or transfer programs.

Electives: Elective courses can be used towards meeting the requirements of 60 units for graduation, once the General Education requirements, the Skill and Proficiency requirements and Major requirements have been completed.

Chart: Los Medanos College Education Plan

Introduction

The Purpose of This Paper

The specific purpose of this paper is to establish criteria that will be used to determine whether or not a course can be designated as a Tier I, general education course and to establish a structure and procedure for the application of these Tier I criteria.

Recommended Action

The members of the Tier I Project Study Group wish the Los Medanos College clusterpersons to approve and recommend for college policy the Tier I criteria, and procedures and structure for the application of said criteria, as set forth in this paper.

The Problem to Which This Paper is Addressed

Los Medanos College has a strong commitment to general education, and over the years has evolved a distinctive, three tiered model. Yet, the model is not complete. Though Tier II (Humanistic Studies 2TG) and Tier III (3TG series) are in place and operating satisfactorily, Tier I, the basic disciplinary courses need attention. The need for attention has been signalled in Position Paper 77-3, the previous accreditation report, and the conclusions of the 2TG-3TG general education project evaluators.

Needed to complete the development of Tier I courses are criteria to designate what is or what is not a Tier I course. Up to now, there has been no clear, comprehensive statement nor consensus on what constitutes a general education course for Tier I. Also pending since the passage of Position Paper 77-3 is a direction to incorporate into general education disciplinary courses the intradisciplinary and other aspects of the now abolished generic course. Until these matters are addressed and resolved, the model will be incomplete, and no effective and consistent curriculum development and decision making for Tier I courses can take place. The criteria and process proposed in this paper will resolve these matters.

The Development of This Position Paper

In Spring 1980, application was made to the National Endowment for Humanities (NEH) for an implementation grant to follow the previous NEH pilot grant that funded the 2TG-3TG development project. The proposal was accepted and funded for a three semester period. The project has three phases, which can be briefly stated as follows:

Fall 1981 - Tier I criteria and procedures developed
Spring 1982 - Application of Tier I criteria; revision and/or development of course outlines
Fall 1982 - Field test, evaluate and revise Tier I courses

During Phase I, a Tier I Project Study Group was formed. The primary task of the group was to develop criteria that would be compatible and consistent with the existing general education model, that would have a genuine education character, and that would be workable and worthwhile. This was a difficult task. The group met frequently and at length to generate ideas, discuss and debate. Now, after numerous drafts and revisions, the study group has arrived at this present paper, which it recommends to the LMC clusterpersons.

Organization of the Paper

Having introduced the topic and shown the problem to which it is addressed, this paper will be now devoted to the criteria and the procedure for their application. Leading into the presentation of the criteria themselves will be a discussion of the criteria and a preamble written to convey some of the more intangible but necessary aspects and spirit of general education that the criteria would not readily communicate. After the criteria are given, the paper turns to the structure and procedures for applying the criteria.

Tier I Criteria

General Education and Education in General

There are numerous and important attributes inherent in all good education, including general education. These are attributes that set high standards for any course seriously designed and taught. A Tier I course would certainly be expected to embody these attributes, though they are by no means exclusive to general education, and thus not criteria per se.

Some of these attributes should be mentioned. Any course, for instance, ought to be learner-centered. Any course ought to have as overarching intentions the enhancement of the learner's abilities and capabilities and the learner's acquisition of knowledge and skills. Any course ought to offer learners the opportunity to expand their understanding of self and others, and to promote respect for self and others. Any course ought to have a positive effect on a learner's sense of competence and assist in the discovery and unlocking of personal potentials. Any course ought to contribute positvely, directly or indirectly, to the way learners live their lives in work, leisure and recreation, in their self-fulfillment and in service to others and in contributions to society. Any course ought to work for the learner's increasing effectiveness as a communicator by helping them be effective in writing, reading, listening and speaking.

Preamble to Tier I Criteria

This preamble strives to convey the spirit of general education, while the criteria convey something of the letter. If there is a distinctive general education curriculum, there is a distinctive general education pedagogy. This pedagogy contributes much to the unique flavor of general education. It may be expressed in a number of ways, be they fleeting and spontaneous or studied and systematic. It may be expressed in the manner and style of instruction, in the selection and handling of content and materials of the course, in the way of regarding the knowledge of the discipline and its possible significance for the learner and how the learner will use it.

It is an active pedagogy that strives to engage the learner in the applications of knowledge to the problems and issues of the real world, public and personal. It is a pedagogy that seeks to select from the vast realms of knowledge of the discipline those materials that contribute in an important way to an explication to the learner of the world and how it works. It is a pedagogy that is less concerned with initiating a neophyte into a discipline than it is with enlarging the learner's comprehension and utilization of knowledge for general understandings. It is a pedagogy ever on the alert for the opportunity to spin out from a point of study to larger and wider ranging connections with other realms of knowledge, other concerns. It seeks to integrate knowledge, to impart skills, to invite the learner to participate in learning that which every person needs to know.

There is a spirit to general education pedagogy. It is something of a frame of mind, a manner of teaching and planning for instruction, that raises questions, draws learners out, makes connections, interprets, lingers on an observation about the where, or why, who or when of the origination and character of some knowledge, that nudges the learner to use the knowledge and to grow in skills and confidence. This spirit, elusive but essential, and refracted into a multitude of variations by the varying characters of the general education instructors, animates general education pedagogy.

To be a part of the distinctive general education curriculum, a Tier I course ought to have certain general, overall attributes in addition to those to be singled out by the criteria. In respect to what is taught, and how it is taught, a Tier I course ought to:

- show the interrelatedness of knowledge, life, events and phenomena on this Spaceship Earth;
- help learners expand and make more accurate their global perspectives;
- be infused with an humane perspective;
- awaken the learner to a consciousness of the future;
- broaden the learner's awareness of the commonalities and uniqueness among the peoples of the Earth;

- impart to the learner a sense of being a participant in the dialogue of the common learning;
- give learners the opportunity to learn about values, their own and others, and to understand the origins, the shaping and influences of behavior of values.

Moreover, in respect to how it is framed, a Tier I course ought to:

- strike a proper balance between the substantive content of the discipline and the general education elements; the course should be neither watered down and made superficial; nor overladen with the necessities that derive from the grounding of a major, or specialist-to-be in the fundamentals of a discipline;
- resonate and reinforce other general education courses but not be redundant or repetitive.

Finally, satisfying the criteria and infusing in the courses the spirit of general education ought to have the effect of giving Tier I courses a distinctive, common stamp. The criteria and spirit, however, must never be allowed to become instruments for exacting excessive conformity. Each instructor must have the freedom to build on his/her own strengths as a teacher, and to utilize her/his special interests, so long as the essential integrity of the criteria and the spirit of general education are upheld. The Tier I courses should move in formation, but not in lock-step.

Characteristics and Applications of the Tier I Criteria

Overview. The Tier I criteria will be used to determine whether or not a course should be given the designation "G" for general education. A criterion, by definition, is a standard, or measure, for making judgments. The Tier I criteria will be applied to any course offered as a candidate for Tier I, and if the criteria are satisfied by evidences in the course outline and in an oral explication of the course outline, the designation will be accorded.

Characteristics of the Criteria. Each criterion is necessarily broad and encompassing. While a criterion will delineate a trait desired in a "G" course, it will not spell out exact, specific ways in which a course outline should satisfy the criterion. That specificity is best supplied by those best suited to be specific, that is, instructors in the disciplines. The criterion does not call for specific content, methods, learner outcomes, or the like, because these will vary according to the discipline and will be set forth in course outlines. Each criterion, however, will have a narrative expansion with examples and illustrations to make more clear its intent. The examples are neither exhaustive nor prescriptive, only illustrative.

Four of the criteria deal with characteristics of the knowledge of a discipline. These criteria ask that a Tier I course teach about the knowledge as well as the knowledge itself. Other criteria deal with processes that engage the learner in the use of the knowledge.

Evidences for Satisfaction of Criteria. Evidence to satisfy the criteria will be sought in the course outline and will include: course goals and objectives, course overview and rationale, the course content and materials, instructional procedures and course policies and procedures. Written evidences will be expanded and explicated by oral presentations.

Application of the Criteria. The criteria are necessarily broad, as the disciplines vary in content, materials, and character. Hence, it is necessary to apply criteria in ways that offer flexibility, that are reasonable, and that have expectations that are appropriate to the possibilities or limitations inherent in a given discipline. Criteria will be satisfied to a degree reasonable and appropriate to a given discipline. Some disciplines should be able to treat some criteria with greater depth or emphasis than other disciplines, and these may be indicated in a criterion.

A Caution. There has been concern expressed that a thorough-going fulfillment of the Tier I criteria in a course outline will cause the displacement of the proper disciplinary content of the course. This should not be the case. The integrity of the subject matter must be observed, while the criteria are being satisfied. While a Tier I course is not primarily a course for the specialist-to-be or the major, it nevertheless must have a solid grounding in the discipline. The content must be comprehensive and have intellectual integrity. The general education elements should weave through the content in a compatible not pre-emptive manner. The general education elements in many cases will be suitably introduced in the way the content is taught—or methods and/or process—in the selection of materials, and through the perspectives of the instructor.

Tier I Criteria

Following are the criteria for Tier I courses:

A. Interdisciplinary

B. Modes of Inquiry

C. Aesthetics of Knowledge

D. Implications of Knowledge

E. Reading and Writing in the Learning Process

F. Effective Thinking

G. Creativity

H. Pluralism

A. Interdisciplinary

Criterion

Is the course interdisciplinary?

Narrative Expansion

An interdisciplinary course connects with other disciplines in its family of disciplines, as grouped in families in LMC's sub-areas. An interdisciplinary course includes, along with the content unique to itself, the fundamental concepts, generalizations, principles, values, attitudes and belief systems common to other disciplines in the given family. Thus a learner studying one course in the social sciences would gain a generalized understanding of the core of shared attributes that are common to the various disciplines of social science. The interdisciplinary course should reveal to the learner the interrelatedness of knowledge.

To satisfy this criterion, each Tier I course will include as content references to the commonalities and interrelatedness of the disciplinary family and in instructional methods show the linkages among the disciplines. Also, a given course taught in an interdisciplinary manner will call upon the knowledge from other disciplines in the family in the study of a given topic.

Illustrations and Examples

An interdisciplinary course could offer as content information on the commonalities that unify a disciplinary family.

A theme or topic in a given course could be studied from the perspectives of other disciplines in the family. Thus a topic in history would be explicated by the perspectives of economics and/or political science.

Examples could be offered from the lives of scholars who have approached the generation of knowledge from an interdisciplinary perspective.

B. Modes of Inquiry

Criterion

Does the course teach the modes of inquiry indigenous to the discipline?

Narrative Expansion

All disciplines have modes of inquiry, that is, ways of generating and testing knowledge that are accepted and integral as a traditional part of the discipline. Frequently, a mode of inquiry may be referred to as a research method, but it may also be a systematic or patterned way of generating knowledge. Learning a discipline's modes of inquiry should enlarge a learner's understanding of a discipline and make available to the learner, for possible emulation, a model of inquiry.

Fields of knowledge develop in historical and social milieux. Understanding when, how, and why the modes of inquiry and knowledge of discipline came into being will add to the learner's understanding of the discipline.

To satisfy this criterion, each Tier I course will teach, as content and as method, the modes of inquiry of a given discipline, and comment on the development of the modes of inquiry and knowledge of the discipline.

Illustrations and Examples

As a way of teaching a mode of inquiry, for example, an history course should provide the learner with a kit of historical materials pertaining to an event and ask the learner to use historical methods to create an account of the event. Or, in conducting a laboratory experiment, the physical science learner could be asked to follow the steps of the scientific method.

Examples of modes of inquiry would include scientific method, literary analysis, statistical analysis, hypothesis testing, elements of artistic excellence or logic of thought.

Instances in the lines of scholars, artists, writers, or scientists that tell of the circumstances of the generation of knowledge or of break-through applications of a discipline's mode of inquiry can be included as course content.

C. Aesthetics of Knowledge

Criterion

Does the course teach about the aesthetic qualities of the knowledge of the discipline?

Narrative Expansion

The aesthetic quality or dimension of the knowledge of a given discipline is important for learners to consider in order to attain a deeper understanding of the discipline. That is, the learner should be engaged with the joy, beauty, elegance of the knowledge. Teaching this quality of the discipline should lead learners to appreciate and understand the majesty and expanding vastness of human accomplishments in the generation of knowledge and also the vastness of that which remains mysterious and unknown. A learner may learn that with the advent of knowledge comes the comprehension of ignorance.

To satisfy this criterion, each Tier I course will comment, in the content of the course, or will convey through instructional methodology, the aesthetic qualities of knowledge. This criterion may be satisfied by explicit content, but often its message may be conveyed in the process of instruction, through demonstration, by examples, or through the observations of the instructor.

Illustrations and Examples

As a way of drawing attention to the aesthetic aspect of knowledge, the learner might be invited to contemplate the intricacies and wonders of the living cell, or the learner might be led through an elegant proof or ingenious solution of a problem. The instructor could model in his/her comments an appreciation of the aesthetic aspects in the course of teaching about music, literature, art or other knowledge.

D. Implications of Knowledge

Criterion

Does the course explore these implications of the knowledge of the discipline; values, ethics and future?

Narrative Expansion

The knowledge of a given discipline will embody values and pose ethical implications, and suggest possible consequences for the future. Considering these aspects will lend to the learner's understanding of the significance of knowledge in a world where knowledge is both a commodity and power, and where the generation and use of knowledge can impact on the present and shape the future. Each Tier I course will be expected to comment on these aspects of knowledge in order to satisfy this criterion.

Illustrations and Examples

The values inhering in a discipline might be explored by examining two contrasting forms, for example, punk rock and classical music.

For a given discipline, examples can be provided that show the impact of knowledge, such as the discovery of the microbe, the theory of evolution, invention of dynamite, the concept of the unconscious, electricty, the invention of the transistor.

Trends in the generation and use of knowledge can be extrapolated into the future.

Values aspects and ethical implications of episodes in the development and application of knowledge can be portrayed and critiqued, e.g. the ethical dilemmas facing scientists who developed the atomic bomb, or genetic engineering, or development of techniques for mass persuasion and engineering of consent in politics and marketing.

E. Reading and Writing in the Learning Process

Criterion

Does the course provide opportunities for learners to develop higher cognitive skills through reading and writing?

Narrative Expansion

Tier I courses will demand the intellectual processes of analysis and synthesis, of comprehending relationships and establishing new ones. In order for learners to be able to organize facts and ideas into a meaningful framework, and in order for new facts and ideas to become integrated with personal experience, a Tier I course should require a significant amount of reading and writing appropriate to the discipline. Writing, in particular, should be used to develop thinking and to promote learning, rather than simply serving in its traditional role as evaluation instrument to measure student progress. Reading assignments should serve a similar function and this should be viewed as information, concepts, and ideas to be intellectually processed, rather than memorized.

Illustrations and Examples

In addition to, or in place of, traditional papers and lab reports, students should learn to use writing as a way to solve problems, to come up with new ideas, to record insights or areas of misunderstanding for themselves as well as their instructors. This can be done through journals, logs, and occasional brief in-class writing periods, as well as through more traditonal writing assignments. Students should view class reading assignments as examples of the processing of information and thus, in addition to "learning facts," might inquire into the manner of their presentation (e.g. the simple statement, "Columbus discovered America," should be examined for its implications). This will help students gain competency in reading and increase their flexibility of thought.

F. Effective Thinking

Criterion

Does the course provide opportunities for learners to enhance their effectiveness in thinking?

Narrative Expansion

Effectiveness in thinking includes independent thinking and critical thinking and the application of these to problem solving and decision making.

To meet this criterion, each Tier I course will be expected to contribute to the learner's capacities as an effective thinker. For the most part, this criterion would be approached through processes of instructional methods rather than content per se.

Illustrations and Examples

The enhancement of thinking effectiveness would include, for instance, teaching stragegies and content that involve learners in deductive and inductive thinking, recognition and repair of logical fallacies, operations of analysis, synthesis, analogous thinking, conceptualizing, strategies for problem solving and decision making, guessing, and the use of intuition.

Independence in thinking would be enhanced, for instance, by encouraging learners to develop confidence in their capacity to make judgments, to encourage toleration of ambiguities, to resist stereotyped thinking and propaganda, to understand and cope with pressures to conform in thinking by peers or media, and to encourage in the learner a questioning attitude and a willingness to take risks.

Course outlines might include as instructional methods various processes of instruction that model effective thinking strategies. Exam questions, laboratory problems, discussion assignments or other class exercises can involve the content and materials of the discipline as a basis for the application of effective thinking instruction.

G. Creativity

Criterion

Does the course introduce creative processes and examples of human creativity?

Narrative Expansion

Creativity, though difficult to define, is generally regarded as an important key to individual learning as well as a major source of human expressiveness. A broad description of creativity could include: the use of imagery and imagination; the use of symbols and media to convey feelings, ideas, or meanings. Also, creativity can be defined as seeing the familiar in an unfamiliar way.

As creativity is essentially a process and not content per se, in most cases it would be addressed through instructional methods. Instructional methods and/or content should affirm the worth of creativity and endorse personal creativity.

To satisfy this criterion, each Tier I course should offer learners opportunities to engage in creative behaviors and introduce and consider appropriate examples of creativity.

Illustrations and Examples

To satisfy the common criterion, a Tier I course might, for example, present, analyze, and appreciate examples of creative endeavors in the discipline.

As an exercise, learners might be asked to come up with your own personality theory, to reinterpret an historical incident, to account for an anomalous phenomenon.

Include activities such as brainstorming, conceptual block-busting, imaging, visualizations, and explore their application to real life situations.

Discussion of the varieties of creative activities.

To satisfy the particular criterion, a course in the visual and performing arts could engage the learner in a study of modes and media of creative expression, and directly engage the learners in their own creative expression. The course could culminate in a group production.

H. Pluralism

Criterion

Does the course encourage learners to consider the variety of perspectives, experiences and persuasions that impact on the society?

Narrative Expansion

In a nation and world made up of many groups and individuals, it is important to consider the viewpoints and contributions of the variety of cultures as well as the dominant culture, of women as well as men, of minority groups and their members as well as the majority group and its members. In most cases, this criteria can be satisfied by instructional processes in which contrasting views are presented and examined, open-mindedness in considering a range of data, including conflicting data, is encouraged, examples offered, and mechanisms of stereotypic, ethnocentric or monolithic thinking are examined, humanities, language arts, and biological sciences should be able to introduce course content to satisfy this criteria.

Examples and Illustrations

The contributions by persons who are identified with minority groups to the knowledge of a discipline can be noted, along with the stories of the circumstances of those contributions.

The positive aspects and strengths deriving from diversity and variety in viewpoints in analysis and problem solving may be modeled and practiced by learners.

Social and psychological theory and concepts that shed light on the mechanisms of discrimination and inequality can, where appropriate, be the subject of study.

Postscript to Tier I Criteria

All Tier I courses, when they satisfy these criteria, will have a distinctive general education character. When learners take a Tier I course, they will have the opportunity to learn the basic knowledge of the discipline, and more; they will have the opportunity to learn about the knowledge, its uses and implications. They will have the opportunity to enhance their own skills in the use of knowledge. This can happen in one course, and be reinforced and expanded as more Tier I courses are taken.

And perhaps there will be for learners a strengthening, or perhaps an awakening, of a quest to form, enrich and enlarge a world view. By world view is meant a personal way of perceiving, valuing and putting in perspective the experiences in life. A world view may for one person be relatively simple, while for another highly sophisticated; for one it may be informed by a religion or a phisosophy; for another it may be shaped by a unique and individual quest for meaning.

Should a learner take the Humanistic Studies 2TG and a course in the 3TG series, the quest for meaning and the evolving of a world view may be further encouraged. And perhaps more. If our courses have been well wrought and if we have taught them well, and if the learner has engaged us and our courses with willingness and profit, then perhaps the general education program will have achieved a high order of purpose by helping the learner undertake a lifetime of learning.

Application of Tier I Criteria and Designation of General Education Courses

Introduction

During Phase II (Spring 1982) of the Tier I Project, the criteria developed in Phase I will be applied to all Tier I courses and to any new course proposed for Tier I. These courses will be revised, as needed, to satisfy the Tier I criteria. Instructors teaching general education courses will lead in the revision of their courses, in consultation with their respective sub-area, areas, and area dean.

During the revision plan, TOP activities will include workshops to introduce and explicate the criteria. The services of outside consultants on subject matter or processes can be secured. Also available for advice and consultation will be the General Education Committee, to be described below.

In general terms, the procedure for Phase II will be this: When a course outline has been revised, or a new course outline developed, it will be submitted to the General Education Committee which will study the outline and confer with the author(s) to judge if the Tier I criteria have been satisfied. If the criteria have been satisfied in the judgment of the committee, the committee will recommend that the course be designated as general education. The structure and procedures for applying the criteria will now be set forth in more detail.

General Education Committee

1. Functions of the General Education Committee (GEC)

   The general and continuing functions of the GEC are:

   1.1 To provide advice and consultation to persons engaged in revising or developing a new course for Tier I

   1.2 To review a course proposed for Tier I for satisfaction of the Tier I Criteria and to recommend whether or not the course should be designated as general education

   1.3 To consider matters, internal to LMC or external, that bear on the general education program and to make recommendations

   1.4 To maintain an oversight of the Tier I criteria and general education program and make recommendations

2. Status of the General Education Committee

   2.1 The General Education Committee will be a standing committee as defined in the LMC governance plan.

3. Membership of the General Education Committee

   3.1 Two faculty members from each of the four areas, to be selected by the area. The term for a faculty member will be two years. During the first year of the General Education Committee, one-half of the faculty will serve for one year, in order to stagger terms for continuity.

3.2 The Dean of each area

3.3 The Director of TOP, for the duration of the Tier I Project

4. Procedures for the General Education Committee

4.1 The GEC will select its own chair.

4.2 The GEC will apply the Tier I criteria to all courses proposed for Tier I and judge whether or not the criteria are satisfied to a degree reasonable and appropriate to the discipline of the course. The GEC will recognize that not all disciplines provide the opportunity for the equal satisfaction of the criteria. Again, recognizing the variability among disciplines, the GEC will regard a course outline as a totality in making its judgment.

4.3 The GEC may call upon the author(s) and/or instructor of the course to explain and expand upon a course outline in an oral dialogue.

4.4 Recommendation will be made upon the affirmative vote of two-thirds of a quorum of the committee. A quorum shall consist of over half of the committee membership.

4.5 The GEC will keep a record of its votes on recommendations and notes on its decisions.

4.6 Meetings of the GEC will be open.

4.7 After a new course has been recommended by the GEC for designation as a general education course, the course will enter the established LMC governance process for new course approval.

4.8 During Phase II, Spring 1982, the GEC will determine if a course outline should be considered a revised course and therefore exempt from the new course approval process, or a new course. A course revised to satisfy Tier I criteria will not be considered a new course unless there has been fundamental and substantive changes in course goals, objectives, content, and/or materials.

4.9 After Phase II, new courses proposed for Tier I and substantively revised Tier I courses will be submitted to the GEC for a determination whether or not they satisfy Tier I criteria.

5. Sequence

Typically, the sequence of events for revision, creation of new courses, and designation will be as follows:

5.1 Introductory workshops will be held to discuss the criteria and revision process for instructors teaching or interested in developing Tier I general education courses.

5.2 Instructors, in consultation with their sub-area, area, area dean, will review the present course outlines for Tier I courses. The GEC will be available for consultation and advice.

5.3 Instructors, in consultation with their sub-area, area, area dean, and GEC will begin course revision. Workshops will be available to provide inputs on ways to satisfy the criteria and incorporate general education expectations into the course outline.

5.4 The revised or new course outline is submitted to the GEC, which may confer with the author(s) of the outline.

5.5. The GEC will make a judgment of satisfaction of the Tier I criteria and make a recommendation of:

5.5.1 designate the course general education, or

5.5.2 refer the course outline to the author(s) for further development.

1.3 Tier One Course Outline Format

A format was developed for the presentation of a Tier I course outline in order to ensure uniformity of treatment and to facilitate judging a course outline for satisfaction of the criteria. A copy of the course outline and instructions to course authors follows.

LOS MEDANOS COLLEGE

COURSE OUTLINE FORMAT AND INSTRUCTIONS FOR TIER I GENERAL EDUCATION COURSES

INTRODUCTION

A course outline for a Tier I course will have to convey more information than the usual course outline. To meet this need, and to make the task of preparing a Tier I course outline more systematic, and, hopefully, easier, this special course outline format has been devised. This course outline format should enable a reader to see readily where and how Tier I criteria are satisfied, as well as give a good picture of the character of the course, what it covers, what it postulates as learner outcomes, how it is organized and how it is to be taught.

Since the General Education Committee must review and recommend course outlines proposed for Tier I, it is important that ways in which criteria are to be satisfied are clearly visible and unambiguous. This visibility will make the work of the Committee more efficient. It will also help the Committee make fair and objective recommendations.

This Tier I course outline has essentially the same components as the standard Los Medanos College course outline format, only components have been rearranged and some have been given added emphasis. Goals and objectives that relate to the Tier I criteria, for instance, are given a strong emphasis and ask for fairly detailed information. This course outline asks for an overview and rationale, but with a different emphasis. The overview is similar. It asks for a brief synopsis of the course. But the rationale asks for a discussion of the general education and Tier I attributes of the course. In effect, the rationale tells why the proposed course should be a general education course.

Another difference between the standard course outline format and the Tier I course outline format is of a mechanical nature, and should make the course outline both easier to do and easier to review. This course outline will be completed on standardized forms. These forms are intended to give the author of a course outline clear guidance as to what is expected, and at the same time to provide pointed and concise information to the reviewers of the course outline.

Here are the components of the Tier I course outline. (Instructions will follow).

1. Catalog description
2. Overview and Rationale
3. Goals and Objectives
   - 3.1 Course content goals
   - 3.2 Criteria related goals
   - 3.3 Other goals
4. Texts and Other Materials
5. Evaluation and Grading Plan
6. Course Policies

INSTRUCTIONS

1. Catalog Description. The catalog description should include the following:

   1.1 Course title and number

   1.2 Unit value

   1.3 Mode of instruction

   1.4 Brief description of the course

   1.5 Articulation statement

   1.6 Prerequisites

   See page 1, course outline format, for the catalog description form.

2. Overview and Rationale. The overview and rationale tell about the course and how it ties in to Tier I and the general education program. This section of the course outline should orient a reader to what the course covers and what argues for its inclusion in Tier I. It also tells what other disciplines are in the course's intra-disciplinary family.

The overview is a narrative description of the course. It should inform a reader of what are the major goals of the course, objectives, and content. Organization of the course, instructional procedures, policy or materials should be mentioned if they have special importance for the course. It is not necessary to enumerate the Tier I criteria in the narrative overview. The rationale should tell why this course is offered as a Tier I general education course. Attributes of the discipline that make it appropriate as a general education course should be mentioned. See page 2 of the course outline format for the Overview and Narrative form.

3. Goals. First, a definition: a goal tells what the course intends to do. (This is in contrast to an objective, which tells what a learner should know, be able to do, experience or feel as a result of taking a course). To simplify the course outline, goals will be set out in three categories.

3.1 Content goal: each course outline will have in it a standard goal statement related to the content of the course. This statement is:

The intent of this course is to introduce the following course content to the learner.

Following this goal statement, a topical outline of the course will show the intended course content. Objectives need not be stated here. See pages 3-4 of the course outline format for the Topical Course Outline form.

3.2 Criteria related goals: for each of the eight criteria, a form will be provided. See pages 5-12 of the course outline format. (If the space on one page proves to be insufficient, duplicate the necessary form and add to the course outline.) Each criteria is phrased as a generalized goal statement. From this general criteria related goal, sub-goals appropriate to the given discipline should be derived.

The form for each criteria is divided into columns. Information will be put into these columns to show how the criteria are to be satisfied. These columns are:

3.2.1 sub-goals - sub-goals relate back to the criterion and tell what the course intends to do to satisfy the given criterion, as appropriate to the content and processes of given discipline.

3.2.2 objectives - in this column, objectives that connect to sub-goals should be given. Objectives describe what the learner should be able to do, to know, to experience or feel, as the result of taking the course. An objective describes a learner outcome. Objectives, or learner outcomes, can be stated in terms of:

> cognitive domain, i.e., knowledge, fact, theory, concept, generalization
>
> affective domain, i.e., ethics, values, attitudes, beliefs, feelings, experience
>
> skills domain, i.e., operations, performances, manipulations

3.2.3 The content of the course will have been shown in the topical outline. Use the outline numbering system for references to show in this column the content that is used in connection with a given sub-goal and objective.

3.2.4 Instructional procedures/materials - if instructional procedures (i.e., teaching methods, strategies, pedagogy) or materials of instruction are means by which a criterion is to be satisfied, they should be indicated (briefly) next to the pertinent goal and objective, and perhaps, the content.

3.2.5 If the course outline is to include some aspect of teaching/learning that cannot be placed in the columns provided, make note on the bottom of the form and explain.

3.3 Other goals and objectives: If a course outline has goals and objectives other than those covered in the course content goal and the criteria related goals and objectives, use the Other Goals and Objectives form. See page 13.

4. Texts and Other Instructional Materials. Give the relevant information on required and recommended texts in this section. Tell what other instructional materials will be used, but describe them by type and character. Do not give specific titles of video recordings, for instance, unless they are an integral, on-going component of the course. It is assumed that titles will change as materials are updated. See page 14.

5. Evaluation Plan and Grading Plan. This component has two parts, a description of how the learner's work will be evaluated, and in a general way, how grades will be calculated. See page 15.

6. Course Policies. In this component, course policies should be stated, such as policies related to attendance, fees, materials, expectations such as field trips, practicum, projects.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: ______________________________

____

Course Author(s): ______________________________

____

1. Catalog Description

Title of course:

Course number:

Unit Value:

Mode of instruction:

Brief description of the **Course**:

Articulation statement:

2. Overview and Rationale

Overview

Rationale

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

(Please give a topical outline of the course in detail sufficient to give the reader a clear idea of the topics to be taken up. Use a consistent numbering system.)

3.1 Course Content Goal, continued

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To teach the intradisciplinary elements of the intradisciplinary family of courses.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To teach the mode(s) of inquiry indigenous to the discipline.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To teach about the aesthetic qualities of the knowledge of the discipline.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials

OTHER:

3.2 Criteria Related Goals: Criterion: **Implications** of Knowledge

Criterion stated in goal form: To explore these implications of the knowledge of the discipline: values, ethics and future.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To provide opportunities for learners to develop higher cognitive skills through reading and writing.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials

OTHER:

3.2 **Criteria Related Goals:** **Criterion:** Critical and Effective Thinking

Criterion stated in goal form: To provide opportunities for learners to enhance their effectiveness in thinking.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials

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OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To introduce to learners creative processes and examples of human creativity.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To encourage the learner to consider the variety of perspectives, experiences and persuasions that have an impact on society.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials

OTHER:

3.3 Other Goals and Objectives

GOALS	OBJECTIVES

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4. Texts and Other Instructional Materials

Required Text(s):

Recommended Text(s):

Other instructional materials:

5. Evaluation Plan and Grading Plan

Evaluation Plan

Grading Plan

6. **Course Policies**

State course policies, such as attendance, fees, materials, expectations regarding such activities as field trips, practicum, projects, and the like.

2. TIER I COURSE OUTLINES

2.1 Behavioral Science

2.1.1 Behavioral Science 5LS: General Anthropology

2.1.2 Behavioral Science 6LS: Cultural Anthropology

2.1.3 Behavioral Science 10LS: Functional Aspects of Psychology

2.1.4 Behavioral Science 11LS: General Psychology

2.1.5 Behavioral Science 15LS: Introduction to Sociology

2.1.6 Behavioral Science 16LS: Introduction to Social Problems

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Behavioral Science 5LS

General Anthropology

Course Author(s): Gail Boucher

For full and part-time Behavioral Science instructors.

1. CATALOG DESCRIPTION

Title of Course:	General Anthropology
Course Number:	Behavioral Science 5LS
Unit Value:	3 units
Mode of Instruction:	3 hour lecture

Brief Description of the Course:

An introduction and general overview of anthropology which is the "study of people." Topics in the General Anthropology course include the variety of characteristics which are true of human existence everywhere. These include: Uniqueness of the Human Learning Ability, Evolution of Culture and Physical Variation, Variations of Lifestyles and Adaptations Around the Globe, Human Language and Expression, Social and Family Organization, and Religion and Artistic Expression.

Articulation Statement:

Transfers to U.C., U.S.U.C. and private colleges and universities. Fulfills General Education requirements as a transfer course at L.M.C.

2. OVERVIEW and RATIONALE

Overview

This course is designed to encourage a comprehensive understanding of human similarities and differences. A cross-cultural and historical overview will provide the basis on which to examine existing issues in other cultures as well as the modern American society. These features include topics such as racial and ethnic differences, social attitudes and organizations, economic and political systems, value structures, sexual and role variations, family forms and kinship situations, division of labor, religious trends, etc.

The course evolves from a holistic approach which is designed to examine many aspects of human experience and which serves to facilitate an understanding of human variation worldwide. Woven throughout the course (and serving as a basic foundation) will be the systematic and comprehansive coverage of concepts, principles and terminologies related to human studies in a cultural context. Course presentation will include a broad perspective and world view; students will then be encouraged to explore specific learned aspects of their own culture in relation to other contemporary and past life-styles. The focus of culture, as well as physical aspects of existence, provide an integrative tool with which to relate all facets of human behavior.

The topics in the course are presented largely through lectures, media presentations and readings in a text as well as supplementary articles and books. The mode of inquiry is conveyed partly through classroom lectures and readings but also by means of direct participation on the learner's part. Classroom activities are designed to involve the student in an active role, whereby he or she utilizes anthropological skills of inquiry firsthand. In addition, class assignments involve the participant in learning process that require the use and development of skills such as writing, critical thinking, assessment, evaluation and integration. Students are encouraged to think for themselves and to create their own conclusions about their learning, particularly as this learning relates to the immediate topics of our time.

Rationale

In today's world, there is a vital need to understand and appreciate the diverse cultures of the world. Anthropology focuses on human nature from a broad and depthful standpoint. It teaches students to understand the principles of human behavior in terms of all humanity instead of one limited perspective. This learning can be well utilized throughout a lifetime.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Introduction

A. The Nature of Anthropology

1. What anthropologists study

a. Sub-fields of Anthropology

1) linguistics
2) archaeology
3) physical anthropology
4) cultural anthropology

b. Purposes of Anthropology

c. Anthropology as a member of the Behavioral Sciences

1) what behavioral scientists attempt to study and understand about human behavior
2) a comparison and contrast of the goals and focuses of anthropology, psychology and sociology
3) common features among the disciplines in behavioral sciences
4) distinctive features among the disciplines in behavioral sciences

2. Methods used in Anthropology

a. the scientific and comparative approach used to study human behavior
b. fieldwork and cultural anthropology

(1) Fieldwork methods

(a) research design and purpose
(b) background preparation
(c) observation techniques
(d) interview techniques
(e) sampling and surveys
(f) psychological tests
(g) case studies and life history interviews

(2) Archaeological Methods

(a) setting up a site, tools and strategies
(b) collecting data
(c) interpreting data
(d) communicating data accurately

c. Physical Anthropology and its methods and approaches

(1) Paleontology

(a) dating techniques (relative and absolute)
(b) fossil analysis
(c) interpreting prehistoric remains (What is fact? Where are fallacies?)

(2) Primatology

(a) laboratory studies
(b) zoo studies ("in captivity")
(c) field studies in the wild

(3) Human variation - Genetics and its place as an anthropological tool

B. The Concept of Culture and the Diversity of Human Behavior

1. The unique fabric of human existence
2. What makes human beings different than other animals?

   a. "Culture" vs. instinct
   b. Values and how people pattern their lives
   c. socialization and learning ability

C. Basic Anthropological Concepts as a Foundation for the Course

1. Social norms

   a. folkways
   b. mores
   c. laws

2. Cultural relativism
3. Ethnocentrism .
4. Cultural pluralism
5. Sub-cultures and contra-cultures
6. Men's and women's status and roles
7. Values and value change
8. Cultural universals
9. Uniques human capacities as these relate to culture

II. The Emergence of Humanity and Human Behavior

A. Evolution as a Multi-dimensional Concept Studied by a Number of Disciplines as a Product of Human Experience

1. Spritual and religious ideas of human emergence
2. Biological and scientific ideas of human emergence

3.1 Course Content Goal, continued

B. The Human Place in the Evolutionary Spectrum

1. Processes of evolution
    a. adaptation, natural selection, change
    b. genetic factors, etc.

2. Related physical, environmental and cultural factors

3. Comparison of human behavior to animal behavior
    a. the non-human primates
    b. why anthropologists study monkeys and apes
        (1) field studies
        (2) laboratory studies

4. Comparative traits

5. Pre-adaptive traits
    a. Brachiation
    b. Stereoscopic vision
    c. Omnivorous diet
    d. Prehensile hand
    e. Nest-building
    f. Single births
    g. Larger brains
    h. Arboreal existence

6. What can Primate Studies tell us about Human Life?

7. The Ethics of Animal Studies

C. The various stages and steps in the evolutionary process and their impact from a "holistic perspective" (i.e., cultural, environmental, physical, social).

1. Members of the human family
    a. Australopithecus
    b. Homo erectus
    c. Neanderthal
    d. Cro-Magnon
2. characteristics of key human sub-species
3. significance of features such as tool usage, symbolism, etc.
4. Implications of Evolutionary Studies

D. Language and Thought: The Unique Human Capacity

1. Symbolism and language
2. The evolution of language and its significance
    a. the difference between communication systems and language
    b. comparisons to animal communication systems
        (1) Dolphins and language
        (2) Primates and language
    c. language and the human brain

3. How anthropologists study language

    a. The field of linguistics
        (1) sociolinguistics
        (2) historical linguistics
        (3) descriptive linguistics
        (4) psycholinguistics
    b. Body language and non-verbal communication
        (1) proxemics
        (2) kinesics
        (3) tactile communication
        (4) paralinguistics

E. Where is Evolution going today?
1. The past as a format to understand the future
2. Who should decide life and death issues?
3. Social, moral, religious and political implications

III. Lifestyles and Adaptations Worldwide

A. Lifestyle Patterns

1. Basic lifestyle "types" and their key definitions and features

    a. hunting and gathering
    b. horticultural
    c. pastoralist
    d. agricultural

2. Cultural, environmental and physical characteristics of various lifestyle patterns. The following terms are defined and integrated as important facets of the various survival patterns:

    a. technology and material culture
    b. economics and exchange
    c. political organization and law, and warfare
    d. social stratification
    e. social organization

B. Comparative aspects of the cultural patterns

IV. Human Physical Variation Around the Globe

A. Theories of the Origins of Racial Differences

1. adaptation
2. geographical, genetic and climatic issues
3. biological theories and "rules" as these relate to human variation

B. Race and Ethnicity Define

1. Historical roots
2. Prejudice, discrimination and stereotyping - Origins and Issues
3. Race and I.Q. - A discussion and clarification
4. The Unesco statement on race

3.1 Course Content Goal, continued

C. Race, Ethnicity, Third World Groups and the Modern World

1. Concerns and considerations - Recognizing racial barriers
2. The status quo today
3. A vision for the future

V. Social Groupings: Family, Mating and Associational Groups

A. Human Nature and Social Organization

1. Compare to primate groups
2. Marriage and family as uniquely human traits
   a. Marriage forms
   b. Marriage rules
   c. Family forms
   d. Kinship relationships

C. Associations and Interest Groups

D. Men's and Women's Roles in Society

VI. Cultural Sub-systems and Emotional Expression in Culture

A. The Human Need for More Than Mundane Existence

1. Religious and spiritual belief systems
2. Art
3. Body decoration
4. Myth, story telling
5. Music
6. Recreation, etc.

B. Aspects and Features of Cultural Sub-systems

C. How Anthropologists Attempt to Study These Features of Human Existence

VII. General Anthropology and Concerns for the Future

A. Biological and Cultural Change in Today's World

B. Technology and the Threat of "Cultural Extinction"

C. Issues and Concerns for the Future

1. A "One-World Humanity"
2. Control over biological destiny and natural resources
3. The threat of Nuclear War and destruction of our world
4. The other end of the "Evolutionary Spectrum"

D. How can anthropology, the study of humankind, provide for our future knowledge?

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To enable students to understand the interrelationships among the behavioral sciences (such as anthropology, psychology and sociology) in their approach to human behavior.	1. The student will be able to: define, compare and contrast the specific purposes of anthropology, psychology and sociology as behavioral science disciplines.	I. A., 1. a. (1) (2) (3) (4) b. c. (1) (2) (3) (4)	Classroom lecture and discussion to include lecture topics such as: a. "Introduction to Anthropology" b. "The Unique Human Being" c. "How Anthropologists Study"
2. To introduce anthropology as a field of study.	2. Relate to a model of a comparative study of humankind and will be able to understand the nature of Human Behavioral Studies.	2. a. (1) (a-g) (2) (a-d) b. c. (1) (a-c) (2) (a-c) (3) (a-c) d.	Media presentation: An Overview of General Anthropology.
	3. Discuss the major sub-fields of anthropology (physical, archeology, sociocultural, linguistics) as these relate to the study of anthropology and to the collective understanding of humanity and human behavior.		Course handout: The Sub-fields of Anthropology.

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
	4. List the specific purposes and methods of the sub-fields of anthropology and explain their value.		In-class writing assignment: What is Anthropology? What is a Human Being?
	5. Compare and contrast the contributions of the behavioral science and divisions of anthropology.		

OTHER:

3.2 Criteria Related Goals: Criterion: Mode of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To encourage students to understand and appreciate the various research designs utilized by anthropologists to understand individual and group behavior.	1. The student will be able to: identify various research models and procedures utilized by anthropologists to study human beings both past and present.	I. A. 2. a. b. (1. a-g) (2. a-d) c. (1. a-c) (2. a-c) (3)	1. Classroom lecture and discussion to include the topics such as: 2. "How Anthropologists Study" "Studying the Nacirema" "Being An Anthropologist - A Day in the Life of ______ Anthropologist" (Excerpts and anecdotes which characterize the position)
2. To discuss the comparative view in human studies and expose students to the position of observer and interpreter of behavior.	2. Name the goals and purposes of anthropological study to include: a. fieldwork steps b. prehistoric research c. human biological differences d. Primatology	I. A. 2. a. b. 1. (a-g) 2. (a-d)	
	3. Define and utilize specific terms and concepts of anthropology distinct to each particular unit. (See each unit plans for detailed listing of concepts and terms)	II. B. 1. 2. 3. a. b. (1,2)	3. Media Presentations: Movies: "A Man Called Bee" "The Bushmen" (Excellent ethnographic films) Slides: An Overview of Anthropology: Anthropologists at Work. Research Assignments: Unit I: "Being An Anthropologist" (See attached Assignment Sheet) Unit II: "Discover the Primates" (See attached Assignment Sheet)

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To expand the student's awareness of the potentials and possibilities of human behavior.	1. The student will be able to: Discuss the commonalities and differences of human behavior, learning and values in a world-wide context. To include the concepts of ethnocentrism, cultural relativity, statuses, roles, norms, and social control.	I. B. 1. 2. a.b.c. I. C. 1. 2. 3. 4. 5. 6. 7. 8. 9.	Classroom lecture and discussion to include topics such as: a. Cultural Flip-Flops: "Humans Around the Globe" b. Beyond the Mundane: Why People Create Outlets such as religious expression, feasts and "art." c. Myths and folklore "story-telling" around the world.
2. To learn about the uniqueness of the human being and discuss this learning meaningfully in both written work & class discussions.	2. Examples of the uniqueness of human responses.	VI. A. 1. 2. 3. 4. 5. 6. B. C.	Audiovisual presentations: a. Films (such as) "Bitter Melons" "A Piece of Stone" b. Slide: (such as) "Shamans and the Supernatural" "American Indian Art" c. Planetarium presentation (Multimedia) entitled "In the Beginning" (World-wide Sky and Creation stories)

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
3. Study cultural subsystems and recognize the functions these serve as a part of the whole, integrated culture.	3. Explain the concept of culture and demonstrate a knowledge of the multidimensional aspects of culture and the impact of cultural learning in their daily lives.	I. B. 1. 2. a,b,c C. 1. a,b,c 2., 3., 4., 5., 6., 7., 8., 9.	Course Materials: a. Articles "The Feast of Love" "Is Science Our Religion"
4. To examine the diversity and variation of emotional and aesthetic expression among peoples.	4. Demonstrate knowledge of concepts and terms that reflect the "abstract" and conceptual nature of human existence such as values, ideals cultural expression, cultural universal, etc.	VI. A. 1., 2., 3., 4., 5., 6.	Class Assignments and values clarification exercises.
5. To explore the concept of worldview and its impact on each culture's lifeway.	5. Discuss and name the variety of spiritual beliefs, philosophies, and artistic expressions in other cultures. Experiment with the creative process from the anthropologist's perspective.	VI. B., C. II. D. 1. 2. a,b (1) (2)	

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To encourage the student to understand the results of choices based on values and ethnical implications as these relate to the field of Anthropology.	1. The student will be able to: Define and discuss the concepts and issues of human physical and cultural variation, racism, prejudice, sexism, culture change, and subcultures as these relate to both individual and group values.	IV. A. 1. 2. B. 1. 2. 3. 4. C. 1. 2.	Classroom lecture topics and discussions such as: a. "Now That We've Climbed to the Top of the Evolutionary Tree, Where Are We?" b. "Anthropology and the Future." c. What It Means That We All Look Different or What is "Race?" d. Is there such a dream a a One World Humanity?
2. Provide an opportunity to learn and understand core concepts and terminologies indigenous to the discipline of Anthropology and the Behavioral Sciences.	2. Discuss the concept of race and ethnicity and explain Anthropological theories of racial origin.	V. C. D. VII. A. 1. 2. 3. 4. B. C. 1. 2. 3. 4.	Self-Quizzed and Values clarification exercises such as: a. "Human Physical Traits" b. The Boy in A Bubble c. Aggression and Human Nature

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
3. Discuss future concerns in the world from an anthropological perspective, and generate ideas and options for these concerns.	3. Compare and contrast the concepts and issues related to biological survival in terms of adaptation and natural selection.	II. A. 1, 2 B. 1. a,b, (1) (2) 2. 3. a,b, (1) (2) 4., 5., 6., 7., II. E. 1,2,3	
4. To consider the concept of a One World Humanity. Can we all co-exist peaceably on this Earth?	4. Explain worldwide problems and concerns for the future and propose possible solutions and examine their implications.	VIII. A.,B., C. 1, 2, 3, 4 D.	
	Identify specific ways that humans vary physically and culturally and enumerate problems that arise when people evaluate and classify human differences.	IV. A. 1,2,3 B. 1,2,3,4 C. 1,2,3	
	Discuss social disruption and conflict resolution.		

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To provide the opportunity for students to reflect their knowledge through reading and writing.	1. The student will be able to: Demonstrate in writing the basic understandings of concepts and principles of anthropology gained through assigned readings and classroom learning.	The entire course outline is basis for these goals and objectives.	The first week reading and writing analysis and evaluation. Exercises to assess student's reading and writing abilities will be administered at an appropriate time during the 1st week of class where appropriate students will be referred for assistance by the class tutor or other resources.
2. To encourage the development and library utilization of research and analysis of skills.	2. Define, recognize, read and write concepts and terms in both written assignments and class examinations. (See unit plans for itemized lists of terms and vocabulary).		Classroom lectures and discussions.
3. To provide the incentive for students to broaden and perfect their reading, vocabulary and integrative abilities.	3. Demonstrate the ability to complete all required class assignments at a satisfactory standard. (See class guidelines for specifics about minimum requirements)		In-class writing exercises and responses: a. The "Brainstorming Process" b. The 10-minute writing process "How to". c. Guidelines for Course Assignments.

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Skills Through Reading and Writing

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
4. To require reading in a college level introductory textbook and supplementary reading.	4. Demonstrate the ability to complete all required class assignments at a satisfactory standard. (See Course Guidelines for the specifics about minimum requirements)	The entire course outline is the basis for these goals and objectives.	Research assignments (for example): a. Being an Anthropologist b. Discover the Primates c. Mini-Cultural Analysis Homework Assignments. Classroom Examinations plus 1st week quiz on the course guidelines.

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To encourage the student to perceive and respond to data in a diversity of ways particular to the discipline of anthropology.	1. The student will be able to: Analyze stereotypical attitudes, myths and beliefs as these relate to traditional societies, foreign cultures, male and female capabilities, diverse ethnic and racial groups, social relationships and value systems.	I. A. B. C. (and all subpoints and headings) III. A. B. IV. A. B. C.	Classroom lecture and discussions to include topics such as: "Humankind Emerging: The Biological and Cultural Significance of the Human Brain and Capabilities" "Aggression and Human Nature: Is It Our Genes or Our Learning that Makes Us Violent?" "Is There Such a Thing As a More "Superior" Culture?" "Men and Women: What Anthropologists Have to Say About Thei Similarities and Differences"

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
2. To provide an opportunity for students to explore and appreciate the potentials of the human mind and its capabilities.	2. Identify and explain the capabilities of the human conceptual process as distinct from an evolutionary perspective.	I. A. (and all B. subpoints C. and headings) III. A. B. IV. A. B. C.	Written research assignments: (for example): a. Being an Anthropologist b. Discover the Primates c. Mini-Cultural Study: A brief data and analysis assignment.
	3. Discuss the present evolutionary position of the human being and the impact of cultural learning on the process of evolution today.		Classroom Activities and Discussions: a. From both sides: Aggression and Warfare. Are they inevitable? b. From both sides; Could there be a classless society?

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To provide the opportunity for students to become involved in the creative process.	1. The student will be able to: Explain the uniqueness of the human symbolic process as it relates to language & thinking.	II. C. 1. 2. a.b. 3. a.1. 2.3.4.	1. Classroom lectures and discussions to include topics such as: a. "Why do People Talk?" What's so unique about human language and thought?"
2. Enable the student to appreciate and understand the complexities and diversities of the human experience such as spiritual and religious expression, artistic outlets and unique communication patterns.	2. The student will be able to explain and analyze the concept of culture in relation to a variety of experiences and features of human life such as rituals, life transitions, death, birth, etc., and creative expression in the form of art, myth, spiritual beliefs, etc.	VI. A. 1. 2. 3. 4. 5. 6. B. C.	b. "Rituals, Feasts and Creative Outlet: No Culture is Without It" c. Why do we dislike strangers? The causes and cures of ethnocentrism. Audiovisual Materials such as: a. "Culture and Food: More Than Just Eating" (Slideshow)
3. To foster an appreciation of the scope of creativity as expressed by human beings around the globe, both past and present.	3. The student will attempt to develop their own theories and explanations for certain aspects of human nature such as human violence and aggression, ethnocentrism, the existence of cultural universals.		b. Who are the "Naciremans?" Slideshow In-class Brainstorming and exercises. Written Assignments such as: -Develop your own theory of aggression. -Explain the U.S. Culture to an "E.T." from another planet. -Write a reaction to the article "100% American."

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To introduce the student to the concepts of diversity in race, sex, and culture as related to the field of Anthropology.	1. The student will be able to: Discuss the concept of "race" and ethnic origins and identify Anthropological theories of racial origins.	I. C. 1. 2. 3. 4. 5. 6. IV. A. (and B. all sub- C. points)	Classroom lecture and discussions to include topics such as: "Race Relations: Past and Present. What Anthropologists say about Human physical variation."
2. Provide a basis for understanding human social relationships in a variety of contexts both individually and worldwide.	2. Examine and discuss social relationships as these are defined by culture to include how our learned belief systems affect world view and how the individual affects others.	V. A. 1. 2. B. 2. (a.b.c.d.) C. D.	"Introduction to Lifeways Around the Globe." Classroom activities and debates.
3. Examine the specific means of survival for human groups and discuss the basis of physical and lifestyle variation.	3. Compare and contrast the technology and economy involved with various lifestyles.	VII. C. 1.2.3.	Audiovisual materials: -The H -Ishi, Last of His Tribe -Exposure to mini-Cultural Studies

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
4. Study the institution of marriage and male/female relationships.	4. Identify guidelines, expectations and restrictions placed on human social behaviors to include: marriage, family, gendre roles, etc.	V. A. 1. 2. a,b,c,d B. C. D.	(LRC #1): a. The Pygmies b. The Eskimos c. South American Indians d. Australian Aborigines
5. Foster an appreciation of the uniqueness value and contribution of human groups around the globe both past and present.	5. Define and discuss the family and kin relations as a social group.		Articles such as: a. "Race & I.Q." b. "Women in a cross-Cultural Perspective"
	Name and discuss the characteristics and contributions of specific cultural groups to the "modern world."	III. A. 1. a,b,c,d 2. a,b,c,d,e B.	

OTHER:

3.3 Other Goals and Objectives

GOALS	OBJECTIVES
1. To provide an historical perspective of the emergence of human physical and cultural capacity as a foundation for human understanding.	1. The student will be able to: Discuss and apply the concepts and principles of human emergence such as: a. the importance of evolution as a concept. b. physical and cultural capacities and their relationship to our present lifeways today.
2. Discuss the human position in the animal world and explore how humans are related to primates.	2. Explain and discuss the importance of "primatology" (both laboratory and field studies) as these relate to Human Behavior.
3. To present specific aspects of divergent lifestyles around the globe.	3. Compare and contrast biological characteristics.
	4. The student will be able to name the similarities and differences of the basic "lifestyle patterns" and identify specific cultural, physical & environmental characteristics of each.
	5. Explain the relationship between environment and lifestyle. Discuss socio-political organization in terms of adaptive lifestyles.

CONTENT	INSTRUCTIONAL
II. A. 1. 2. B. 1. a. b. 2. a. b. 3. a. b. 4. a. b. c.	1. Classroom lecture and discussions. 2. Reading material: The Primate Packet 3. Activity: Zoo visitation 4. Media: a. Primate movies and videos b. Slides such as: 1. American Indians 2. Yanomamo 3. The Eskimos 4. The Pygmies 5. The Australian Aborigines
III. A. 1. a.b.c.d. 2. a.b.c.d.e. B.	1. Classroom lecture and discussion 2. Reading material such as: Lifestyle Adaptations Packet 3. Mini-cultural Study: Research Assignment

5. Evaluation and Grading Plans

EVALUATION PLAN

I. Grading and Evaluation Policies

A. The purpose of the evaluation process is to ascertain and access the level at which each student has mastered the subject matter in anthropology. As a result, the evaluation procedure will involve a committment from instructor and students. Evaluation will occur a number of ways:

1. In-class attendance and participation
2. Homework assignments
3. Research assignments
4. Class examinations

B. Minimum Requirements: In order to pass the class, students must complete the following minimum requirements:

1. Attend class regularly (attendance is taken daily and closely monitored).
2. Read all assigned reading
3. Satisfactorily complete all class assignments
4. Take and pass class examinations

C. Grading Policy:

1. Students are required to complete class assignments and tests. Each assignment or test is "worth" a certain number of points. Grade equivalents are also determined, so that the student is aware of how many points he or she has earned and the grade equivalent. The actual class performance will be utilized as a point of reference, but grades will be closely aligned to percentages of the total achieved:

   90% = A

   80% = B

   70% = C

   60% = D

2. Students will have the opportunity to choose to do optional extra work (in the form of special research projects). The grade in the course is determined by what is completed (QUANTITY) as well as how well it is completed (QUALITY).

D. Point Values and Grades

The final grade earned is based on tests, written assignments, attendance, any in-class responses, and an optional field project.

6. Course Policies

I. Course Requirements, Policies and Guidelines

A. Attendance and format for class lectures

1. Regular attendance is required in order to earn a passing grade.
2. Scheduled class time will involve primarily lecture presentations, but will also include slides, movies, discussions and other activities.
3. During class time, students are expected to take notes and are responsible for all material covered. This includes slides, media presentations, lectures, and discussions.
4. Everyone in the class must:
   a. attend class regularly (a total of three absenses is the maximum allowed. All work must be made up).
   b. take all test.
   c. Complete all assignments.
   d. (Optional) - complete a field project assignment

B. Due Dates and Assignments

1. All assignments and due-dates are announced well in advance. In addition, the course calendar for the entire semester lists all of the due dates and tests.
2. You are encouraged and welcome to clarify questions, or receive any help that you need, in order to fulfill class assignments. Please do not hesitate to get help.
3. It is your responsibility to pace yourself and allow the appropriate amount of time to complete the work. Therefore all assignments are due and will only be accepted on the dates announced.

C. The Optional Field Project Assignment

1. Fieldwork is the hallmark of anthropology. These projects provide an opportunity to use some of the actual techniques of anthropology and to apply these to individual interests and personal lives.
2. Details about the field project are available in the bookstore in a special packet.
3. Anyone who intends to earn an "A" grade should complete a field project.

D. Required Reading

1. Textbook (available in the campus bookstore)
2. Supplementary Readings (provided in class unless otherwise noted)
3. Being an Anthropologist - Assignment available "on reserve" in the Learning Resource Center
4. Field Project Packet - available for purchase in the campus bookstore. Only those interested in completing a field project will need to purchase this small booklet.

E. Policies About Reading and Writing Assignments

1. The assigned reading is outlined on a weekly basis in your class calendar. Students should prepare for class by completing the week's reading assignment prior to class meetings
2. Students are responsible for all reading assigned and should check the calendar weekly.
3. Reading/writing assessment. Exercises to assess student's reading and writing abilities will be administered at an appropriate time during the first weeks of class. Where appropriate, students will be referred for assistance by the class tutor or other resources.
4. Students will be expected to work within the framework and guidelines of their assessments in order to meet classroom assignment standards.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Behavioral Science 6LS
Cultural Anthropology

Course Author(s): Gail Boucher
For full and part-time Behavioral Science instructors.

1. CATALOG DESCRIPTION

Title of Course:	Cultural Anthropology
Course Number:	Behavioral Science 6LS
Unit Value:	3 units
Mode of Instruction:	3 hour lecture

Brief Description of the Course:

An introduction to the study of Cultural Anthropology where the learned aspects of human life are studied. The course focuses on the observation and analysis of cultural traditions to include child-rearing processes, lifestyle types and adaptations, social and family life and the many creative elements in human societies. Students will be exposed to divergent cultures and learn of the status of today's vanishing cultures.

Articulation Statement:

Transfers to U.C., U.S.U.C. and private colleges and universities. Fulfills General Education requirements as a transfer course and at L.M.C. and C.S.U.C.

2. OVERVIEW and RATIONALE

Overview

This course is designed to present and examine the many facets of culture from an anthropological perspective. Students will learn the foundational concepts and principles of human cultural traditions based on learning. These principles will then be applied to specific groups. A broad worldview will be established and students are encouraged to understand and respect different societies around the globe. Exposure to today's "vanishing cultures" (and other issues related to culture change) as well as the idea of strengthening human ties around the globe will be emphasized.

The Cultural Anthropology course provides the opportunity to learn the basic tools, terminologies and concepts essential to the discipline. Through classroom activities, written research assignments, and homework, students are taught theoretical, analytical and observation skills which they can apply to distinguishable cultural facets of daily life. In addition to the classic theoretical orientations and foundations of Cultural Anthropology, lied the challenge for current students to confront timely issues about the very nature of studying other groups. (Thereby exposing and changing them in the process.)

The impact of socialization, child-rearing, cross-cultural comparisons and in-depth cultural analysis of particular human group is emphasized. Students are encouraged to "take on the role of the anthropologist" as a result of class assignments which encourage their ability to integrate and interpret behaviors.

The topics in the course are presented largely through lectures, media presentations and readings in a text as well as supplementary articles and books. The mode of inquiry is conveyed partly through classroom lectures and readings but also by means of direct participation on the learner's part. Classroom activities are designed to involve the student in an active role, whereby he or she utilizes anthropological skills of inquiry firsthand. In addition, class assignments involve the participant in learning processes that require the use and development of skills such as writing, critical thinking, assessments, evaluation and integration. Students are encouraged to think for themselves and to create their own conclusions about their learning, particularly as this learning relates to the immediate topics of our time.

2. Overview and Rationale, continued

Rationale

One of the most pressing problems of modern society is the need to develop a "multi-cultural" understanding, both within and outside of, national boundaries. Toward this end, the concept of "culture" will be the focal point of the introductory course in cultural anthropology. Course presentation will provide the opportunity to analyze the impact of cultures: All that is learned, shared and interwoven into the quality of human life experience. Students will explore the meaning and impact of such elements as child-rearing, language, group relationships, social organization, world view, religion, social institutions, environment, etc., from both an individual and societal perspective.

A cross-cultural approach will be emphasized, providing exposure to other cultural systems. Slides and movies will visually supplement this emphasis. In addition, both the modern United States culture and Native American cultures will be used as a reference model and comparative resource. Students will be encouraged to "apply" their learning experiences and skills through classroom activities and assignments, in order to facilitate maximum learning and understanding of human behavior and institutions.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Introduction

  A. The Nature of Cultural Anthropology

    1. What Cultural Anthropologists study

      a. Cultural Anthropology within the field of anthropology
      b. Sub-fields of anthropology: A brief definition

        (1) Linguistics
        (2) Archaeology
        (3) Physical Anthropology
        (4) Cultural Anthropology

      c. Purposes of Anthropology and Cultural Anthropology
      d. Cultural Anthropology as a member of the Behavioral Sciences

        (1) What Behavioral Scientists attempt to study and understand about Human Behavior
        (2) A comparison and contrast of the goals and focuses of Anthropology, Psychology and Sociology
        (3) Common features among the disciplines in Behavioral Sciences
        (4) Distinctive features among the disciplines in Behavioral Sciences

    2. Methods used by Cultural Anthropologists

      a. The scientific and comparative approach to study Human Behavior
      b. Fieldwork and Cultural Anthropology

        (1) Fieldwork methods

          (a) Research design and purpose
          (b) Background preparation
          (c) Observation techniques
          (d) Interview techniques
          (e) Sampling and surveys
          (f) Psychological tests
          (g) Case studies and life history interviews

        (2) Problems and issues in doing fieldwork:

          (a) Ethical concerns and considerations
          (b) Funding and values
          (c) Implications and outcomes as these relate to the group's well-being and survival

- (d) Privacy and exposure
- (e) The anthropologist as a "Change Agent"
- (f) The "duo-role" of the participant and observer; Is is possible?

    1) going native
    2) ethnocentrism
    3) cultural bias
    4) translation accuracy

(3) Archaeological Methods: Creating cultural lifeways of the past

- (a) Setting up a site, tools and strategies
- (b) Collecting data
- (c) Interpreting data
- (d) Communicating data accurately

(4) Primates and animal studies as these relate to human learning

c. Analysis of cultural data to understand learned behavior

B. The Concept

1. The unique fabric of human existence
2. What makes human beings different than other animals?

    a. "Culture" vs. instinct
    b. Values and how people pattern their lives
    c. Culture and society
    d. Culture and the individual

C. Theories in Cultural Anthropology

1. Cultural evolutionary theories
2. Functionalism
3. Neo-evolutionism
4. Ecological theories
5. Ethno-science and mentalist theories
6. Bio-cultural theories

D. How to Understand Theory and its Application

1. The purpose of theories
2. Theory as the cornerstone to interpretation of data
3. Theoretical orientations and explanations
4. Comparison and contrast of various theoretical approaches
5. Designing a theory about human behavior

3.1 Course Content Goal, continued

E. Important Cultural Anthropologists, Historical Figures and Their Contributions

1. Franz Boas
2. Bronislaw Malinowski
3. Margaret Mead
4. Leslie White
5. Edward Wilson
6. Levi-Strauss

F. Basic Anthropological Concepts and Terminologies which serve as a Foundation for the Course

1. Social norms

   a. Folkways
   b. Mores
   c. Laws

2. Cultural relativism
3. Ethnocentrism
4. Cultural Pluralism
5. Sub-cultures and contra cultures
6. Men's and women's status and roles
7. Values and value changes
8. Cultural universals
9. Unique human capacities as these relate to culture

II. The Socialization and Enculturation As The Cornerstone for Understanding Learned Behavior

A. The Process of Socialization and Enculturation

1. Preconditions of Socialization
2. Agents of Socialization
3. Worldview thinking and the impact of early training in cultural traditions

   a. Basic human needs
   b. Harlowe's monkey experiments
   c. Stanford Cat experiments and "shaping"

B. Cross-Cultural Child-Rearing and Culture and Personality Studies

1. Psychological Anthropology

   a. Personality theories
   b. Personality tests
   c. "National Character" studies

2. How culture shapes its members

   a. Cross-Cultural comparison of child-rearing habits and practices
   b. Developmental stages
   c. Assessment techniques

C. Analysis and Conclusions

1. Formal theories
2. Informal theories - generated by students
3. Case studies and applications
4. Research assignment

D. Language and Thought: The Unique Human Capacity

1. Symbolism and language
2. How anthropologists study language

    a. The field of linguistics - Its purpose and relevance in the "Study of Culture"

        (1) Sociolinguistics
        (2) Historical linguistics
        (3) Descriptive linguistics
        (4) Psycholinguistics

    b. Body language and non-verbal communication

        (1) Proxemics
        (2) Kinesics
        (3) Tactile communication
        (4) Paralinguistics

    c. Language and human cultural capacity

        (1) How language shapes culture and thought
        (2) Unique aspects of learned language patterns

            (a) Ex. Men's language
            (b) Women's language
            (c) Language and cultural values

III. Lifestyles and Adaptations Worldwide - An Introduction to the Heart of Cultural Anthropology and the Basis for Interpretive Work

A. Lifestyle patterns and "learned" lifeways

1. Background Preparation - Basic lifestyle "types" and their key definitions and features

    a. Hunting and gathering societies
    b. Horticultural societies
    c. Pastoralist societies
    d. Agricultural societies

3.2 Course Content Goal, continued

2. Cultural, environmental and physical characteristics of various lifestyle patterns. The following terms are defined and integrated as important facets of the various survival patterns:

    a. Technology and material culture
    b. Economics and exchange
    c. Political organization and law and warfare
    d. Social stratification
    e. Social organization

IV. Studying Specific Cultural Groups: Applying The Theories and Concepts of Cultural Anthropology

A. Why study other groups?
B. Learning to analyze

1. Context
2. Comparison
3. Developing theories
4. Critical thinking

    a. Utilizing different thinking modes
    b. Logic: Inductive and seductive thinking
    c. Integration and synthesis

C. Observing and Explaining Cultural Patterns and Behavior: How to Understand Cultures as a "Whole":

1. The integration of anthropological terms and concepts with specific cultural data
2. The cultural data sheet as a point of reference

    a. Environment/Ecosystem
    b. Settlement and residence patterns
    c. Tools, technology and material goods
    d. Kinship systems, family groupings
    e. Value systems, spiritual and religious orientations
    f. Art, recreation, clothing, costumes, decor
    g. Socio-economic and political organization

3. Conclusions: Summajrizing the culture as a whole

V. Social Groupings: Family, Mating and Associational Groups

A. Human Nature and Social Organization: The "Foundation" of human groups"

1. Bonding, dependency, etc.
2. Cultural universals

B. Marriage and Family Patterns and Forms

  1. Characteristics of social patterns
  2. Integrated with various lifestyle "types"

    a. Marriage forms
    b. Marriage rules
    c. Family forms
    d. Kinship relationships

C. Associations and Interest Groups

D. Men's and Women's Roles in Society

E. Analysis of Social Relationships in Society

VI. Cultural Sub-systems and Emotional Expression in Culture

  A. The Human Need for "More Than Mundane Existence" - A Brief Overview (particularly as these relate to a specific cultural study)

    1. Religious and spiritual belief system
    2. Art
    3. Body decoration
    4. Myth, story telling and folklore
    5. Music
    6. Recreation, etc.
    7. Worldview and Philosophy: All People Create One

      a. The human being as philosopher
      b. Perception and culture

  B. Aspects and Features of Cultural Sub-systems

  C. How Cultural Anthropologists Study These Features of Human Existence

  D. Theories about Religious Beliefs and Mythology: What Anthropologists Say About Why They Exist Everywhere

  E. Methods to Collect Syb-System Data Utilizing Folklore as a Sub-system Emphasis

    1. Folklore as a part of our daily lives
    2. Students as "collectors" of folklore: The cornerstone of cultural tradition
    3. American Indian Myths and Tales
    4. Storytelling in our daily lives

VII. Cultural Anthropology and the Future of the World's Peoples

A. Culture Change and Its Impact

1. Acculturation
2. Diffusion
3. Assimilation
4. Extinction

B. Technology and the Vanishing Cultures

C. The Role of Applied Anthropology

D. Implications for the Future

1. Our culture
2. Other cultures

E. Problem-solving some Issues and Concerns for the Future - from a cultural anthropologist's view:

1. Cultural designs for living into the 21st century
2. Cultural anthropologists as educators
3. Should we continue to study human groups?
    a. Ethical implications and concerns
    b. Conclusions and Reflections

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To enable students to understand the interrelationships among the behavioral sciences (such as Anthropology, Psychology and Sociology) in their approach to human behavior.	1. The Student will be able to: Define, compare and contrast the specific purposes of Anthropology, Psychology and Sociology as Behavioral Science disciplines.	I. A. 1. a. (1), (2), (3), (4) b. c. 2. a. b. (1) (a-g) (2) (a-d) c.	1. Classroom lectures and discussion to include: a. what are the Behavioral Sciences? b. How does Anthropology compare to other disciplines? c. What is Cultural Anthropology? d. What is a Human Being?
2. To introduce Cultural Anthropology as a field of study.	2. Relate to a model of a comparative study of humankind and will be able to understand the nature of Human Behavioral Studies.	I. C. 1-6 I. D. 1 1-5 I. D. 2 1-5 I. E. 3 1-6	2. Media Presentation: An Overview of Cultural Anthropology

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
	3. Identify the distinguishing features and methods of cultural anthropology.	I. A. 1. a b 1-4 c d 1-4 2. a b (1) a-g (2) a-f (3) a-d (4) c	3. Course Handout: The subfields of Anthropology. What is culture? What is cultural anthropology?
	4. Compare and contrast the purpose of cultural anthropology to other areas of anthropology and to the goals of sociology and psychology as well.		

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To encourage students to understand and appreciate the various research designs utilized by cultural anthropologists to understand individual and group behavior.	1. The student will be able to: Identify various research models and procedures utilized by anthropologists to study human beings.	I. A. 2. a. b. (1. a-g) (2. a-d) c.	1. Classroom lecture and discussion to include topics such as: "How do cultural anthropologists study?" "Why study cultural anthropology?" Theoretical Approaches in cultural anthropology and how to use theories to interpret behavior" "Who are the important contributors to cultural anthropology?"
2. To provide an opportunity for students to apply the principles and skills utilized by the Cultural Anthropologist.	2. Identify specific theories and methods utilized by Cultural Anthropologists and name some of the main individuals who have contributed their ideas and methods.	I. C. 1-6 I. D. 1-6 I. G. 1-5	2. Classroom activities "The Interview Sheet" Unit I Assignments: "Using the Cultural Anthropologist's Tools"

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
	3. Discuss how cultural anthropologists study; list the background preparation and field work steps involved.	IV. A. B. 1. 2. 3.	3. Course Handouts: "The Methods of Cultural Anthropology" "Theories of Cultural Anthropologists"
	4. Demonstrate skills in observing and analyzing cultural process, based on skills used by anthropologists.	C. 1. 2. (a-g) 3.	4. Class assignments which emphasize anthropological skills: 1. Optional Field Project Assign. 2. Life History Assign 3. Child-rearing Research Paper 4. Cultural Analysis Assign.
	5. Assess theories and develop a theoretical approach to explain behavior.		5. Movie: "A Man Called Bee"

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach about the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
I. To expand the student's awareness of the potentials and possibilities of human behavior.	1. The student will be able to discuss the commonalities and differences of human behavior, learning and values in a world-wide context. To include the concepts of ethnocentrism, cultural relativity, statuses, roles, norms and social control.	I. B. 1. 2. a.b.c. E. 1. 1, 2, 3, 4, 5, 6, 7, 8, 9	Classroom lecture & discussion to include: -"The Strange & Interesting Naciremans: What it sounds like, is not what it is!" -"The Habit of Self-centered Superiority: Is it Human Nature -"Folklore, Superstition & Myth-making: Storytellers, Past and Present" -"Why Believe in Anything? Anthropological Roots of of Spirituality in Human Cultures
2. Expose students to a cross-cultural perspective and world view and to facilitate their understanding of cultural diversity - its origins, meaning and richness.	2. The student will be able to discuss the concept of culture - its nature, impact, scope and origins in the human species, identify the relationship between culture and society.	VI. A. 1, 2, 3, 4, 5, 6 B. C.	Media presentations: - "The Nacirema" - Myth & Foklore in other Cultures

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
3. Introduce students to the concept of culture and provide an opportunity to explore the impact of cultural learning in numerous aspects of life.	3. Demonstrate and utilize conceptual terms and vocabulary of cultural anthropologists that reflect humanity's interest in creating beauty and excitement in their daily lives: such as: Mythology world view, art, body decor, values, ideals, rituals, etc.	VII. A. 1 2 3 4 5 6 7 a,b B. C. D.	3. Values Clarification exercises: a. 100% American b. "Dialogue from Another perspective"
4. Learn about the uniqueness of humankind's cultural capacity and to sample the many forms and outlets created by human groups both past and present.	4. Explain the varieties and purposes of religion, the arts, music, and other emotional outlets and give cross-cultural examples to support these ideas.	E. 1, 2, 3, 4	4. Course Articles: a. What is culture? b. Ethnographic "mini-articles"

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline

Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To encourage the student to understand the results of choices based on values and ethnical implications as these relate to the field of Cultural Anthropology.	1. The student will be able to: Define and discuss the concepts and issues of cultural variation racism, prejudice, sexism, culture change, and subcultures as these relate to both individual and group values.	IV. A. B. 1,2,3 C. 1,2, (a-g) 3	Classroom Lecture and discussion on topics such as: -Is is ethnically right to study other groups? -Is modernization the ultimate measure of a culture's contribution? -What is cultural extinction? How does it occur?
2. Provide an opportunity to learn and understand core concepts and terminologies indigenous to the discipline of Cultural Anthropology and the Behavioral Sciences.	2. Discuss the concepts of cultural relativity and ethnocentrism as these relate to the status of diverse cultural groups today.	V. C., D., E. VII. A. 1,2,3,4 B. C. D. 1,2,3	2. Values clarification exercises such as: values clarification ideas: a. "The Island People: b. "The Nuclear Initiative"

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline

Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
3. Encourage the development of "cultural relativity"- tolerance for human similarities and differences.	3. Identify the processes and stages of culture change and explain the purpose of Applied Anthropology related to the issue of culture changes.	VII. A. 1,2 3,4 B. C. D. 1,2 E. 1,2, 3, a,b	3. Articles and assignment: a. "The Plight of the IK" b. "Custer Died For Your Sins" Read and react to the articles from "both sides"
4. Discuss and debate the issues of "culture change" in the modern world.	4. Name the processes of change and their outcomes; propose ideas and opinions about culture change and the future.		4. Audiovisual presentations, such as: a. Video: The Bushman of the Kalahan revisited. b. Movie: "A Man Called Bee" c. Slides: The Lasaday
5. To explore the ethical issues and current situation as a result of colonization and modernization on traditional societies.	5. Analyze and debate the specific situations in various cultural groups today, cite examples and specific concerns.	III. A. 1. a,b,c,d 2. a,b,c,d,e	

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To provide the opportunity for students to reflect their knowledge through reading and writing.	1. The student will be able to: Demonstrate in writing the basic understandings of concepts and principles of anthropology gained through assigned readings and classroom learning.	The entire course outline is basis for these goals and objectives.	1. The 1st week "Reading and Writing" analysis 2. Classroom lectures & discussion 3. "In-class writing exercises" ex. Write a letter to an American as a member of ________ society. Summarize the movie in 3 paragraphs. 4. The research assignment: "Culture Analysis of ________ (name of group)
2. To provide the opportunity to examine and analyze cultural and social institutions in the U.S. and worldwide: their purpose, position and variability.	2. Demonstrate the ability to analyze cultural groups - to explain how and why certain patterns exist.		

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
3. To provide exposure to anthropological works and to encourage knowledge and appreciation of these through sharpened vocabulary and analysis skills.	3. Recognize, define and correctly utilize all concepts and terms essential to the cultural anthropology course in both written assignments and class examinations. (These are detailed in the unit plans)	The entire course outline is basis for these goals and objectives.	5. The Cultural Data Sheet (Data is collected and explained by students) 6. Classroom examinations 7. Homework assignments.
4. To require the completion of an introductory cultural anthropology text and ethnographic research in the discipline.	4. Demonstrate the ability to complete all required class assignments at a satisfactory standard. (See Course Guidelines for the specifics about minimum requirements)		

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To encourage the student to perceive and respond to data in a diversity of ways particular to the discipline of Cultural Anthropology.	1. The student will be able to analyze stereotypical attitudes, myths and beliefs as these relate to traditional societies, foreign cultures, male and female capabilities, diverse ethnic and racial groups, social relationships and value systems.	I. A. (and all subpoints and headings) B. C. D. III. A. B. C.	1. Classroom lectures and discussions to include: -"How to understand the various aspects of culture" -"Pieces of a puzzle: Yes, the characteristics of a lifestyle do fit together" -"What are the basic elements of any lifestyle and why do these exist?" -How to explain a culture (the cultural data sheet and what it means) 2. Class assignments such as: a. The Research Assignment: Cultural Analysis of _____ (name of group) b. The Cultural Data Sheet (Data is collected and explained by students)
2. To expose students to concepts of change and conflict and enable them to explore the possibility of conflict resolution particularly in terms of modern societal issues.	2. Identify the processes and stages of culture change and explain the purpose of Applied Anthropology related to the issue of culture change.	IV. A. B. C. VII. A. B. C. D.	

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide opportunities for Learners to Enhance Their Effectivness in Thinking

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
3. To encourage logical thinking through application of various theoretical stances and to require reflection analysis as a part of the classroom experience.	3. Analyze and explain the ways that lifestyles are integrated using cultural examples to illustrate.	III. A. 1. a,b, c,d 2. a,b,c, d,e	3. In-class activities such as: a. Take a Stand: (class debate) Should Anthropologists continue to study other groups (pro/con)? Is Applied Anthropology ethical and fair for all concerned? Who has it better, men or women, in today's society?
	4. Read an ethnography and write an analysis based on the cultural data sheet. Examine the means of survival at all levels.	IV. A. B. 1,2,3, 4 a,b,c C. 1, 2, a-g 3.	
	5. Explain and define various aspects of economic anthropology to include theories about material wealth, values and economic systems.		

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To provide the opportunity for students to become involved in the creative process.	1. The student will be able to: Explain the importance of language in culture and list the methods utilized by Cultural Anthropologists to to study both verbal and non-verbal communication.	II. C. 1. 2. a. b. 3. a. 1. 2. 3. 4.	1. Lecture & discussion information to include topics such as: -"Human Language and Body Language: Our claim to fame in the animal world." -"Where does personality come from?" -"Who invented marriage and why anthropologists claim that marriage solves problems" -"Cross-cultural fun: What people do in their spare time" 2. In-class brainstorming and writing exercises
2. Enable the student to appreciate and understand the complexities and diversities of the human experience such as spiritual and religious expression, artistic outlets and unique communications patterns.	2. Explain and analyze the concept of culture in relation to a variety of experiences and features of human life such as rituals, life transitions, death, birth, etc., and creative expression in the form of art, myth, spiritual beliefs, etc.	IV. A. B. 1. 2. 3. 4. C. 1. 2. a-g 3. VI. A. 1. 2. 3. 4. 5. 6. B. C.	

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
3. Discuss language and body language as a unique human trait and explore how humans acquire language.	3. Explain the nature of the enculturation and socialization process and their pervasive influence in the child-rearing process.	II. A. 1,2, 3, a,b,c B. 1 a,b,c 2 a,b,c C. 1,2, 3,4 D. 1, 2 a 1-4 b 1-4 c 1 2 a-c	3. Written and/or research assigns. such as: -The child-rearing research paper. -Dialogue from another perspective. (Write a response to question, share with classmate who took the opposite stance!) -Folklore and superstitions: collecting and sharing.
4. Study social relationships as the foundation of cultural existence: marriage, family, kin and interest groups of various kinds.	4. Discuss and examine theories about human thought and personality development using various cultural examples.		4. Multi-media presentations: (such as): -"Child-rearing around the world" -"Rock music as a cultural phenomenon"
	Discuss the nature, purpose and importance of marital and family relationships to include "rules," terminologies, etc.	V. A 1,2 B 1,2 a-d C D E	

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To introduce the student to the concepts of diversity in race, sex, and culture as related to the field of Anthropology.	1. Examine major social institutions such as social and family organization, religious systems, political organization and economic structure as well as explain factors influencing the nature, development and function of these social institutions.	I. C. 1. 2. 3. 4. 5. 6. (and all sub-points) IV. A. B. C.	Classroom lecture and discussion to include topics such as: Is there such a thing as universal "Right & Wrong" (Exs. from a cross-cultural perspective). The cultural Flip/Flop questionnaire "Pluralism: Can we learn to live with variety?"
2. Provide a basis for understanding human social relationships in a variety of contexts both individually and worldwide.	2. Discuss the commonalities and differences of human behavior, learning, and values in a worldwide context, to include the concepts of ethnocentrism, cultural relativity, statuses, roles, norms, and social control.	V. A. 1. 2. B. 1. 2. (a-d) C. D. E.	Values Clarification Exercises: Becoming Aware of stereotypical and judgmental thinking

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
3. To encourage a sense of appreciation of responsibility to all members of human culture.	3. Explain the relationship between cultural factors and gender roles and explain the impact of learning on values, roles, and behaviors related to gender.	VII. D. 1. 2. 3.	In-class problem-solving and writing assignments.
4. To encourage a culturally relative perspective when learning about various groups and lifeways.	4. To discuss, explain and cite examples of cultural diversity and value differences.		
5. To foster an appreciation of the uniqueness, value and contributions of human groups around the globe, both past and present.	5. List and explain possible solutions to issues related to culture conflict and value differences; cite examples and analyze outcomes.		

OTHER:

3.3 Other Goals and Objectives

CONTENT

I.
  E.
    1.
    2.
    3.
    4.
    5.
    6.
    7.
    8.
    9.

III. A.
    1. a-d
    2. a-e

IV. A.
  B.
    1.
    2.
    3.
  C.
    1.
    2. a-g
    3.

V. A.
    1.
    2.
  B.
    1.
    2. a-d
  C.
  D.
  E.

VI. A.
    1.
    2.
    3.
    4.
    5.
    6.
  B.
  C.
  D.
  E.

INSTRUCTIONAL PROCEDURES/MATERIALS

1. Classroom lectures and discussion to include topics such as the following:
   - a. "Lifestyles Around the Globe: An Introduction and Discussion."
   - b. "Major features of Cultural Lifeways and Why They Exist"
   - c. "How People Keep Order and Solve Problems"
   - d. "The Parts of a Puzzle Do Fit Together: Making Sense of Cultural Lifeways"
2. Values Clarification Exercises
3. Media Presentations and films such as:
   - a. The Yanomamo
   - b. Pepe's Family
   - c. The Dani (videotape)
   - d. The
4. Class Research Assignments:
   - a. Reading a specific ethnography.
   - b. The Cultural Data Sheet
   - c. Mini-Cultural Analysis

3.3 Other Goals and Objectives

GOALS	OBJECTIVES
To present specific aspects of divergent lifestyles around the globe.	The student will be able to: Discuss and apply various terms and concepts that relate to the study of universal lifestyles, such as status, roles, norms, cultural relativity, ethnocentrism, social control, etc.
To expose students to diverse cultural traits, characteristics and viewpoints.	
To introduce the concepts and terminologies linked with the study of cultural anthropology as applied to divergent lifestyles.	Identify certain aspects of divergent lifestyles, name the differences and similarities among lifestyle patterns identify the characteristics of lifestyle types and explain why these exist.
	Name and distinguish the key features of the basic "lifestyle types" and utilize this data in relationship to particular lifestyle groups.
	Examine the major social institutions and family organization, religious systems, political organizations, and econo structures as well as explain factors influencing the nature, development and function of these social institutions.

5. Evaluation and Grading Plans

EVALUATION PLAN

Grading and Evaluation Policies

A. The purpose of the evaluation process is to ascertain and assess the level at which each student has mastered the subject matter in anthropology. As a result, the evaluation procedure will involve a committment from instructor and students. Evaluation will occur a number of ways.

1. In-class attendance and participation
2. Homework assignments
3. Rsearch assignments
4. Class examinations

B. Minimum Requirements: In order to pass the class, students must complete the following minimum requirements:

1. Attend class regularly (attendance is taken daily and closely monitored)
2. Read all assigned reading
3. Satisfactorily complete all class assignments
4. Take and pass class examinations
5. Minimum writing standards must be met for any assignment to earn a passing grade. Those papers that do not meet the minimum requirements must rewrite the paper assignment for credit. Special guidelines and tutoring help is provided.

C. Grading Policy:

1. Students are required to complete class assignments and tests. Each assignment or test is "worth" a certain number of points. Grade equivalents are also determined, so that the student is aware of how many points he or she has earned and the grade equivalent. The actual class performance will utilized as a point of reference, but grades will be closely aligned to percentages of the total achieved:

   90% = A

   80% = B

   70% = C

   60% = D

2. Students will have the opportunity to choose to do optional extra work (in the form of special research projects). The grade in the course is determined by what is completed (QUANTITY) as well as how well it is completed (QUALITY).

D. Point Values and Grades

The final grade earned is based on tests, written assignments, attendance, any in-class responses, and an optional field project.

6. Course Policies

I. Course Requirements, Policies, and Guidelines

A. Attendance and Format for Class Lectures

1. Regular attendance is required in order to earn a passing grade.
2. Scheduled class time will involve primarily lecture presentations, but will also include slides, movies, discussions, and other activities.
3. During class time, students are expected to take notes and are responsible for all material covered. This includes slides, media presentations, lectures, and discussions.
4. Everyone in the class must:

    a. Attend class regularly (a total of three absenses is the maximum allowed. All work must be made up).
    b. Take all tests.
    c. Complete all assignments.
    d. (Optional) - complete a field project assignment.

B. Due Dates and Assignments

1. All assignments and due-dates are announced well in advance. In addition, the course calendar for the entire semester lists all of the due dates and tests.
2. You are encouraged and welcome to clarify questions, or receive any help that you need, in order to fulfill class assignments. Please do not hesitate to get help.
3. It is your responsibility to pace yourself and allow the appropriate amount of time to complete the work. Therefore all assignments are due and will only be accepted on the dates announced.

C. The Optional Field Project Assignment

1. Fieldwork is the hallmark of anthropology. These projects provide an opportunity to use some of the actual techniques of anthropology and to apply these to individual interests and personal lives.
2. Details about the field project are available in the bookstore in a special packet.
3. Anyone who intends to earn an "A" grade should complete a field project.

D. Required Reading

1. Textbook (available in the campus bookstore).
2. Supplementary Readings (provided in class unless otherwise noted).
3. Being an Anthropologist - Assignment available "on reserve" in the Learning Resource Center.
4. Field Project Packet - available for purchase in the campus bookstore. Only those interested in completing a field project will need to purchase this small booklet.

E. Policies About Reading Assignments

1. The assigned reading is outlined on a weekly basis in your class calendar. Students should prepare for class by completing the week's reading assignment prior to class meetings.

2. Students are responsible for all reading assigned and should check the calendar weekly.

3. Reading/writing assessment. Exercises to assess student's reading and writing abilities will be administered at an appropriate time during the first weeks of class. Where appropriate, students will be referred for assistance by the class tutor or other resources.

4. Students will be expected to work within the framework and guidelines of their assessments in order to meet classroom assignment standards.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Behavioral Science 10LS

Functional Aspects of Psychology

Course Author(s): Estelle Davi, Thais Kishi, Ofelia Marino

For full and part-time Behavioral Science instructors.

1. CATALOG DESCRIPTION

Title of Course:	Functional Aspects of Psychology
Course Number:	10LS
Unit Value:	3.0 units
Mode of Instruction:	3 hour lecture

Brief Description of the Course:

This psychology course is designed to deal with selected concepts and principles of psychology. Emphasis is on the functional aspects of individual and group behavior. It will focus on psychology as a discipline within the Behavioral Sciences and its relationship to Anthropology and Sociology. Areas of study will include the understanding of human behavior from philosophical and theoretical viewpoints, stages in human development and the social and psychological influences on one's self-concept.

Articulation Statement:

Transfers to U.C., C.S.U.C., and private colleges.
Fulfills General Education requirements at L.M.C. and C.S.U.C.

2. OVERVIEW and RATIONALE

Overview

This course is designed to provide a theoretical foundation of the concepts and principles in Psychology and its application for useful understanding of human behavior. Students are provided with diverse psychological viewpoints in examining behavior as a means toward self-understanding. It also introduces the student to cross-cultural and interdisciplinary perspective as a means of viewing the commonalities and differences in human behavior that exist within our world. A pervasive theme is the individuals adjustment to the challenges of life transactions and societal changes. Topics such as: the interplay of social conditions that influence behavior, development of one's identity, ethical issues and the societal implication of motives, attitudes, beliefs and actions related to human behavior, interpersonal communication patterns as a means to function effectively in society, etc., will be discussed. Through the analysis of psychological theories and the learner's personal history they are encouraged to think critically. Confronted with examining their own ideas, values, beliefs and attitudes they develop both a conceptual view of psychology and gain an appreciation of the human being. A multiplicity of teaching approaches will be used in addressing these concepts such as: lecture/discussion, group dynamics, value clarification, multimedia presentation, reading in the text, and supplemental articles and readings.

Rationale

We are facing a critical and challenging period in the history of mankind. Some of our crucial problems are related to overpopulation, nuclear weapons and war, depletion of natural resources, socio-economic and political conditions, the changing of family patterns and sex roles, and the issue of equality. A major current concern is the rapid changes in technology. Technical advances are creating great opportunities for new frontiers, but they are also the source of great anxieties and new problems. Due to these problems, there is a need for students to have a conceptual understanding of these concerns so they can develop skills in analysis, critical thinking and tools for effective living. Functional Aspects of Psychology helps students in the development of these skills.

Functional Aspects of Psychology is a general education course and incorporates major themes common within the Behavioral Sciences - Anthropology and Sociology. Psychology utilizes many modes of inquiry in the attempt to understand, describe, predict and influence behavior - particularly human behavior. There is a continual attempt to apply the theories and research findings to understand societal problems and their affect on the individual. The students hopefully will turn to the insights of the Behavioral Sciences - particularly Psychology - to gain an appreciation for the beauty and essence of human existance.

This course will provide the student with the opportunity to reflect their knowledge of the subject matter through reading and writing assignments and exercises.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Introduction

- A. Overview and Expectations
    1. Goals
    2. Processes
    3. Reading and writing assessment
    4. Review of G.E. criteria
- B. Questions addressed by Functional Aspects of Psychology
    1. How do people develop a concept of self?
    2. How does the self-concept affect an individual?
    3. Why do people act the way they do?
    4. How does culture affect behavior?
    5. What influences and shapes interpersonal communication?
    6. How can the knowledge of psychology help a person?
- C. Key concepts in Functional Aspects of Psychology
    1. An appreciation of the individual self-concept and its affect on behavior.
        - a. Physical stages
        - b. Emotional stages
        - c. Ethnic, racial and cultural components
    2. Motivation - the force that directs human behavior
        - a. Instigated
        - b. Directional
        - c. Selective
        - d. Satiable
    3. Psychology as seen from a Non-Western perspective: Cultural Relativity
        - a. Similarities that exist within the cultures
        - b. Differences that exist within the cultures
        - c. Pluralism
            - (1) Male/female roles
            - (2) Minority and majority groups

3.1 Course Content Goal, continued

4. Wonders of Human Expression: Interpersonal Communication Patterns
    - a. Verbal
    - b. Nonverbal

D. Tools for Effective Learning

1. Learning skill development

2. Choices as they affect the decision-making process

3. Goal setting

4. Critical analysis

5. Self-understanding

6. Psychological and societal concerns

II. Psychology as a Discipline within the Behavioral Sciences

A. Definition of Psychology as a Discipline

B. View of human behavior from an interdisciplinary perspective

1. Commonalities within the Behavioral Sciences disciplines (Psychology, Sociology and Anthropology)

2. Differences within the Behavioral Sciences disciplines (Psychology, Sociology and Anthropology)

3. Psychology in relationship to other disciplines, i.e., Biology

C. Modes of Inquiry in Behavioral Sciences
Examples may include:

1. Experimental

2. Survey

3. Naturalistic

4. Clinical

5. Longitudinal

6. Introspection

3.1 Course Content Goal, continued

III. Factors Relating to Human Development

A. Understanding peoples' basic nature from a variety of philosophical perspectives:

1. Human nature as good/evil

2. Human nature as neutral

3. Human nature as rational/irrational

4. Human nature as free/determined

B. Describing peoples' basic nature from various theoritical psychological perspectives.

1. Psychoanalytic Theory - Freud

a. Structure of personality
b. Structure of mind
c. Stages of development
d. Societal implications: i.e., father of personality theory, sexism

2. Behavioristic Theory - Skinner

a. Classical conditioning
b. Instrumental conditioning-shaping
c. Behavioral technology
d. Societal implications: i.e., free will vs. determinism; power and control

3. Humanistic Theory - Rogers, Maslow, et al

a. Free-will/choice
b. Self-actualization
c. Societal implications: i.e., human potential movement

4. Comparative analysis of the psychoanalytic, behavioristic, humanistic schools

IV. Emergence of the unique self: Biological, Social-Environmental and Psychological

A. Biological Determinants

1. Genetic endowment

2. Intelligence

3. Temperament

4. Talents

5. Sensing and perception systems

3.1 Course Content Goal, continued

B. Social - Environmental

1. Learning
2. Emotions
3. Coping skills
4. Social responsiveness
5. Identification

C. Structure of the self-concept: Psychological

1. Body/self
2. Self-recognition
3. Reflected self
4. Self-esteem
5. Aspirations and goals
6. Personal competencies
7. Extensions of self
8. Self-ideal

D. Stages of Human Development: Life cycle transitions (Psychological, Social and Emotional)

1. Prenatal environment and the first 18 months
2. Toddlerhood: 18 months to 4 years old
3. Early school age: 5-7 years old
4. Middle school age: 8-12 years old
5. Early adolescence: 12-18 years old
6. Later adolescence: 18-22 years old
7. Early adulthood
8. Later adulthood

E. A creative description of the unique self

3.1 Course Content Goal, continued

V. Definition of Socialization

   A. Preconditions of Socialization

      1. On-going society

      2. Biological inheritance

      3. Human nature

   B. Institutions of Socialization

      1. Family

      2. Peer groups

      3. School

      4. Religion

      5. Political

   C. The impact of the socialization focuses on the individual

VI. Attitudes and values and their effect on the self-concept, self-esteem and behavior in a social, emotional and cultural context

   A. Social and psychological influences

      1. Ethnic, racial and cross-cultural influences

      2. Class structures

      3. Group membership

      4. Prejudice

      5. Stereotypes

      6. Discrimination

   B. Evaluation of the learner's attitudes in regards to current societal issues

      1. Utilizing (VI, A 1-6)

      2. Male/female roles

      3. Media and its effects on behavior

      4. Technology

      5. Controversies in the application of psychological knowledge

3.1 Course Content Goal, continued

- VII. Tools for Effective Living
  - A. Interpersonal communication skills - a multicultural perspective
    1. Verbal - congruent and incongruent messages
    2. Nonverbal - congruent and incongruent messages
    3. Analysis of interpersonal communication skills
    4. Analysis of intercultural communication skills
  - B. Forms of assistance of effective living
    1. Community resources
    2. Community referrals

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To foster an understanding of human behavior from an interdisciplinary perspective.	1. The student will be able to state cultural and ethnic diversities in understanding and interpreting human behavior	I. C., 1 I. C., 3 VI. A., B	Lecture/Discussion Textbook chapters Course handouts and articles Slides and tape presentation
2. To familiarize the student with concepts of culture influencing patterns of behavior.	2. The student will compare and contrast different cultural patterns (verbal and nonverbal).	I. C., 4 VII. A.	" "
3. To provide an opportunity for students to understand the interrelationship among the behavioral science disciplines.	3. The student will explain the similarities and differences that exist within the disciplines of psychology, sociology and anthropology.	II. B.	" "
4. To provide a basis of understanding the concepts of human development from a philosophical and psychological perspective.	4.0 The student will be able to identify the philosophical perspectives of human nature.	III. A.	" "
	4.1 The student will be able to compare and contrast the three major schools of psychology.	III. B.	" "
	4.2 The student will compare and contrast their views of human nature with the content presented.	III. A., B	" "

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
5. To provide an opportunity for students to understand the physchological, sociological and anthropological effects of institutions on human behavior.	5. The student will be able to explain the agents of socialization and their affect on individual behavior.	V. B., C.	Refer to page 9

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To encourage students to understand and appreciate various research methods used by Behavioral Scientists.	1. The student will identify several methods used in psychological research.	II. C.	Lecture/Information Textbook chapters Course handouts and articles
2. Students will be introduced to introspection as a specific mode of inquiry used by psychologists.	2. The student will apply introspection as a method of inquiry for the purpose of self-analysis.	II. C., 6	Research Assignments related to personal data
3. The student will gain an appreciation of the methods used in generating a psychological theory.	3. The student will state research methods used by Freud, Skinner, and Rogers in the development of their theories.	III. B.	Lecture/Discussion Course handouts and articles Written assignment

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To appreciate the beauty and essence of human existence.	1. The student will examine the components which provide the basis of understanding the self-concept.	I. C., 1	Lecture/Discussion Textbook chapters Course handouts and articles
	1.1 The student, through auditory and visual experiencing, will examine the means by which people communicate.	I. C., 4 VII. A.	May include: Audiovisual presentations Demonstrations Role playing
2. To expand the students awareness of the potentials and possibilities of human behavior.	2. The student will be able to define the commonalities and differences in the emergence of the unique self through biological, social-environmental and psychological determinants.	IV. A. B. C. D.	Lecture/Discussion Textbook chapters Course handouts and articles May include; Individual/group projects Debate
3. To appreciate the miracle of human life.	3. The student will be able to cite examples of the complexities of the human organism.	IV. A. B. C. D.	Lecture/Discussion May include: Slide presentations Films

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
4. To demonstrate the power and beauty of psychology as an instrument to influence, understand and increase human potentialities.	4. The student will examine and evaluate psychology as a tool for influencing behavior. To include the concepts of motivation, learning, decision-making, goal setting, etc.	The entire course outline. Specifically: I. C., 2 III. A. B. C. IV. A. B. VII. A.	Lecture/Discussion May include: Critical thinking exercises Introspection Special assignments

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To explore ethical questions involving personal and societal issues.	1.0 The students will apply the concepts taught in psychology to their lives.	Entire Course Outline	Lecture/Discussion Debate/Brainstorming Course handouts and articles
	1.1 The student will investigate values and ethical positions in society effecting human relationships. To include the concepts of societal norms, roles, values, status, and attitudes.	I. C., 3 D., 6 III. B., 1., d 2., d 3., d VI. A., B. VII. A.	May include: Debate-Brainstorming Value clarification Role Playing Small group discussion Writing assignments In-class writing Journals Essay/Report Autobiographical sketch
2. To explore the ethical issues in the use of psychological knowledge in controlling human behavior.	2.0 The student will analyze the theory and application of behaviorism as it relates to the issue of control.	III. B., 2	" "
	2.1 The students will examine the impact of power and control in their lives.	III. B., 2	" "

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
3. To show how societal and/or individual values and viewpoints influence psychological theories.	3.0 The student will cite the world conditions in the era of Freud, Skinner and Rogers.	III. B.	Refer to page 14
	3.1 The student will explain how world conditions influenced the theories of Freud, Skinner and Rogers.	III. B.	
	3.2 The student will cite early life experiences of Freud, Skinner, and Rogers and how these influenced their ideas.		

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognative Skills Through Reading and Writing

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To provide the student the opportunity to examine their reading	1. The student will participate in a reading and writing exercise to evaluate their skills. (pre & post)	I. A., 3	Reading Assessment Writing Assessment
2. To provide the opportunity for students to reflect their knowledge of the subject matter through reading and writing.	2. The student will be able to demonstrate in writing basic understanding of concepts and principles in psychology.	Entire course outline.	Reading and Writing Assignments In-class Homework May include: Essay assignment Book reports Term papers Journals Response papers Personality assessments Tests/Quizzes/ Exams

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To acquaint the learner with the processes involved in effective and critical thinking.	1. The student will explain the learning process as it applies to effective and critical thinking.	1. I. D	Lecture/Discussion
	1.1 The student will demonstrate a knowledge of problem solving through the analysis of a life situation.	1.1 I. D	Brainstorming Lecture/Discussion May include: Written assignment Group process activity
2. To provide the learner the opportunity to investigate modes of inquiry utilized in the Behavioral Sciences.	2. The student will examine the importance of critical thinking in evaluating modes of inquiry.	2. II. C	Textbook readings Lecture/Discussion May include: Brainstorming Written analysis

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
3. To provide the learner the opportunity to understand major psychological theories.	3. The student will compare and contrast the major schools of psychology.	3. III. B., 4	Lecture/Discussion Reading
4. To acquaint the learner with the impact of socialization.	4. The student will examine how socialization affects the development of an individual's self and the self in relationship to society.	4. V. C VI. A B	Media presentation Brainstorming Lecture/Discussion
5. To promote attitudes and skills that contribute to independent thinking.	5.0 The student will define and discuss independent thinking.	5.0 I. D	Lecture/Discussion
	5.1 The student will identify learning styles.	5.1 IV. D VII. A	May include: Library assignments Research analysis

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To provide the students the opportunity to discover, explore, and appreciate their creativity.	1.0 The student, through class participation, will experience forms of creative expression	Entire course outline	Activities may include 1. imagery 2. role playing 3. expression through fine arts 4. problem solving/ thinking process 5. creative writing
	1.1 The student will select one medium to construct a self-profile.	V. E	The student will selec from a variety of mediums various ways to illustrate a self-profile. Choices may include: 1. self-portrait 2. self-description through creative writing 3. a pictorial histor of one's life

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives Experiences and Persuasions that have an Impace on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To provide an understanding of the biological, psychological and societal influences on the self-concept.	1.0 The student will define and give examples of physical, psychological and societal components which contribute to the self-concept.	I. C., 1	Media presentation Lecture/Discussion Readings
	1.1 The student will give examples of cultural differences and similarities in the development of the self-concept.	I C., 3	Family mapping Lecture/Discussion Readings
2. To show how human behavior is viewed from the various disciplines within the behavioral sciences.	2. The student will define and give examples of commonalities and differences that exist within anthropology, sociology, and psychology.	II. B.	Lecture/Discussion
3. To show how attitudes and values are influenced by social and cultural factors.	3. The student will define and give examples of prejudice, discrimination, racism and sexism.	VI. A. B.	Lecture/Discussion Media Guest speakers Value clarification Written assignments
4. To investigate multicultural diversities in communication patterns.	4. The student will define and give examples of verbal and nonverbal forms of communication.	VII. A.	Lecture/Discussion Demonstrations Role playing
	4.1 The students will give examples of misunderstandings based on intercultural differences.	VII. A., 4	Lecture/Discussion Demonstrations Role playing Readings

OTHER:

3.3 Other Goals and Objectives

GOALS	OBJECTIVES	CONTENT
TO BECOME AWARE OF COMMUNITY AGENCIES.	THE STUDENT WILL BE ABLE TO CITE SEVERAL PUBLIC AGENCIES USED FOR RESOURCES AND REFERRALS.	VII. B.

4. Texts and Other Instructional Materials

Required Textbook:

To be determined.

New text for Fall, 1984

The Psychology of Human Behavior - Kalish

Supplemental articles (raised on current issues)

Recommended Text(s):

Reserved readings in Learning Center

Other instructional materials may include:

Films:

- Men's Lives
- Sex Role Development
- The Pinks and Blues
- Bill Cosby's - On Prejudice

Slide Presentation:

- Socialization and Cross-Cultural Child-rearing
- Just Because You Are Big You Think You're Right
- Sex-role Development
- Development of the Self-concept

5. Evaluation and Grading Plans

EVALUATION PLAN

There will be frequent evaluations of students work. Evaluation will include written work, examinations, and student participation. Additional methods of evaluation may include special projects and assignments.

GRADING PLAN:

1. Basis for points:
    - 1.1 Tests
    - 1.2 Assignments
    - 1.3 Final Examination
2. Grading Scale (based on total points)

    100% - 90% - A

    89% - 80% - B

    79% - 70% - C

    69% - 60% - D

    59% - F

GRADING:

6. Course Policies

Since Functional Aspects of Psychology is taught and developed by several instructors, there is the opportunity for instructors to rotate among sections teaching units, concepts, or processes where they have a special interest and expertise.

Students will be assessed for reading and writing skills at the beginning of the semester for purposes of referrals, tutorial or special work.

Students will be expected to attend class regularly and punctually.

Students will be expected to purchase class materials, such as textbooks, deemed appropriate by individual instructors.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Behavioral Science 11LS

General Psychology

Course Author(s): Thelma Scott

For full and part-time behavioral science instructors.

1. CATALOG DESCRIPTION

Title of Course:	General Psychology
Course Number:	Behavioral Science 11LS
Unit Value:	3 units
Mode of Instruction:	Lecture

Brief Description of the Course:

The exploration of the goals and objectives of psychology, its historical trends as well as controversial issues, methodology and application for studying human behavior. Topics include learning and cognitive processes, the relationship between mind and body, the life span, individual differences and mental health. Interrelated skills of scientific knowledge, value analysis, clarification and the synthesizing of knowledge and values are emphasized to develop an interdisciplinary perspective of the diversified psychological issues.

Articulation Statement:

Transfers to U.C., C.S.U.C. and private colleges. Fulfills general education requirements at L.M.C. and C.S.U.C.

2. OVERVIEW and RATIONALE

Overview

The course, General Psychology is designed to expose students to theories and controversial issues that affect the lives of friends, neighbors, family and themselves. Issues such as the following are presented: controlling behavior versus personal freedom; the roles of genetic, cognitive and environmental factors in shaping individual development and personality; the biological correlates of behavior; current approaches to mental life as a basis of behavior; the dynamics of classifying mental disorders; etc. Factual information on theories and critical issues are presented through a methodology allowing students to examine evidence, see relationships, develop and critically examine personal insights.

Psychological research methodology, ethical implications, intradisciplinary perspectives and a pluralistic approach are applied to the basic areas of psychology (investigation, physiological, experimental, developmental, clinical and social) to provide a firm foundation for future exploration in psychology either on a personal level or through other courses. Through continued emphasis on specific skill development of critical and effective thinking, reading and writing, value clarification and synthesis of knowledge, the course will equip students with the appropriate tools to better measure their role in society.

Rationale

The study of human nature and human behavior offers a great challenge to everyone. In trying to determine what a human being is, invariably you must deal with the human nature. Much of what has been attributed to human nature is in reality a product of a given society and culture. Questions like why people behave in diverse ways, what and how characteristics are developed and how individual differences occur provoke the investigation of personal values and evidence bearing on such questions.

General psychology provides a foundation for studying human nature through an intradisciplinary and pluralistic approach utilizing a diversity of inquiry methods. This foundation provides a rationale for a general psychology curriculum focused on helping students develop the ability to make reflective decisions and become actively involved with their own destinies.

Because of the vast array of subject areas within general psychology, emphasis is placed on vital skills such as critical and effective thinking, reading and writing. Through the exploration of others' ideas and ideals within general psychology, students have the opportunity to gain further clarification on both the aesthetics and implications of psychology as well as expand their creativity as it relates to the study of human behavior.

The methodology by which information is presented, the emphasis placed on the continuous development of specified skills and the content of controversial issues demand students to discern what objective evidence tells them and clarify their values. Such a conglomeration of methods and information constitutes the thrust of a general education: the development of an effective foundation in students in order to become active participants within society.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. A Psychological Overview

  A. The Behavioral Science Family

    1. Examining similarities and differences in critical areas

  B. Psychology and Everyday Life

  C. Historical Review

    1. Theory and research methodology

  D. Diversity Among Psychologists

  E. Psychology and You - The Student

II. The Mind and Body Together

  A. The Nervous System

    1. The brain vs. personality development
    2. How psychologists study the nervous system

  B. Heredity and Environment

    1. Controversial issues and theories
    2. Interaction and Influence on behavior and personality

  C. Sensations and Perceptions

    1. Information in-take and its effects
    2. Cultural differences

  *D. Critical Issues and Implications

    1. The Right to Die: Clinical death vs. medical death
    2. Ethical considerations regarding physiological manipulation of behavior.

III. Learning and Cognitive Processes

  A. Principles and Applications

    1. Classical and operant conditioning
    2. Factors affecting learning
    3. Learning strategies
    4. Learning complicated skills

*Issues identified are suggested and are subject to change based upon current literature, trends, and other (more recently) developed issues within a given semester.

3.1 Course Content Goal, continued

B. Measures of Memory

1. Sensory memory
2. Short-term memory
3. Long-term memory
4. Theories of forgetting
5. Central processing

   a. thinking
   b. problem-solving
   c. creativity

C. Intelligence

1. Theories
2. Testing
3. Determinents
4. Development

D. Altered States of Consciousness

1. Consciousness and unconsciousness
2. Sleep and dreams
3. Acquiring altered states
4. Effects on cognitive processes

*E. Critical Issues and Implications

1. Is Intelligence Inherited?

F. Race, Gender Role and Cultural Considerations

IV. The Human Life Span

A. Motivational Theories and Development

B. Emotional Development

C. Developmental Processes

1. Exploration of social, personality and development theories
2. Socialization and the life cycle
3. Social roots of personality

D. Emergence of Self

*E. Critical Issues and Implications

1. Traditional sex roles vs. the survival of the family unit
2. The influence of watching TV on social skills, aggression, and other characteristics of personality

F. Race, Gender Role and Cultural Considerations

*Issues identified are suggested and are subject to change based upon current literature, trends, and other (more recently) developed issues within a given semester.

3.1 Course Content Goal, continued

V. Individual Differences and Mental Health

A. Adjustment in Contemporary Society

1. Stress and anxiety
2. Adjustment mechanisms
3. The well-adjusted vs. maladjusted individual
4. Societal implications

B. Personality Theories

C. Breakdown and Disturbance

1. Abnormal behavior
2. Problems of classification

D. Therapy and Change

1. Historical review
2. A look into the future

*E. Critical Issues and Implications

1. Are mental disorders a medical problem?
2. Who's to determine the "Real You?"
3. Effects of psychiatric labeling on mental patients.

F. Race, Gender Role and Cultural Considerations

*Issues identified are suggested and are subject to change based upon current literature, trends, and other (more recently) developed issues within a given semester.

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To have students understand the interrelationships among the Beh. Sciences (such as Anthro., Psych., and Soc.) in their approach to human behavior.	1a. Define, compare and contrast the specific purposes of Anthro., Psych., and Soc. as Beh. Science disciplines	I. A. 1	Lecture/Discussion Study skills: utilizing textbook; identifying main ideas.
	1b. Examine the historical, current and future trends in the field of psychology.	I. C. 1 V. D. 1, 2	Lecture/Discussion Slide presentation Study skills: inferring ideas from content.

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To have students understand and appreciate the various research designs by psychologists utilized to understand individual and group behavior.	1a. Identify various ways of how psychologists conduct research.	I. C. 1 II. A. 1 III. C. 2 V. C. 2	Lecture/Discussion Slide presentation
	1b. Describe what psychologists have discovered about learning, memory, thought, and perception and how they made these discoveries.	III. A. 1, 2, 3, 4 B. 1, 2, 3, 4, 5 II. C. 1, 2	Lecture/Discussion Slide presentation
	1c. Evaluate psychological studies and weigh the evidence for conflicting views.	II. D. III. E. IV. E. V. E.	Lecture/Discussion Slide presentation/ Films/video-tapes
	1d. Examine deviant types of behavior and techniques for therapy.	V. C. 1, 2 D. 1, 2	Written assignments: identifying cause and effect relationships.
	1e. Define the various techniques for changing behavior.	III. A. 1 V. D. 1, 2	

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
2. To have students understand how human development involves qualitative as well as quantitative changes.	2a. Cite examples of the uniqueness of human response to societal issues that affect the quality and quantity of their existence.	I. B, E II. B. 1, 2 C. 2 IV. C. 1, 2, 3 D. F.	Lecture/Discussion Slide presentation
	2b. Detail the intellectual, social and psychological developments of an individual through the entire life cycle.	III. C. 3, 4	
	2c. Describe the lifelong process of adjustment - how people cope with stress and deal with certain problems/issues that occur.	V. A. 1, 2, 3, 4 E. F. III. A. 1 V. D. 1, 2	

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To expand the students' awareness of the potentials and possibilities of human behavior.	1a. Discuss commonalities and differences of human nature, personality, social and intellectual development of individuals of diversed cultures.	II. B. 1, 2 C. 2 III. F IV. C. 1, 2, 3 F.	Lecture/Discussion Video-tapes
	1b. Discuss the diversity of race, sex and culture as they influence personality and behavior.	V. A. 4	Lecture/Discussion
	1c. Examine the different ways people respond to the opportunities and problems encountered during the life cycle.	IV. C. 2 V. A. 1, 2, 3, 4	Lecture/Slide Presentations
	1d. Detail the intellectual, social and psychological developments of an individual through the the entire life cycle.	III. C. 3, 4 IV. C. 1, 2, 3	Lecture/Slide Presentations

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
2. To challenge students to develop and appreciate the vast common assumptions of the relationships between the mind and body.	2. Explain how the nervous system works and how heredity and environment interact and influence behavior.	II. A. 1, 2 B. 1, 2	Lecture/Discussion Slide presentation Video-tape/demonstration Lab work
3. To offer students a framework for veiwing human behavior in all its complexity.	3a. Explore the underlying reasons why we are motivated to act in certain ways and the importance of emotions.	IV. A. B. C. 1, 2, 3	Lecture/Discussion
	3b. Analyze stereotypical attitudes, myths, and beliefs in relationship to critical psychological issues.	II. D. III. E. IV. E. V. E.	Written assignment: differentiate between myth and fact.

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge for the Discipline: Values, Ethics, and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To have students understand the results of choices based on values and ethical implications in psychology.	1a. Explore the underlying reasons why we are motivated to act in certain ways and the importance of emotions.	IV. A. C. 1, 2, 3 D.	Lecture/Discussion Written assignments: gathering specific information to expound on or defend.
	1b. Define the various techniques for changing behavior.	III. A. 1, 2 V. D. 1	Lecture/Discussion Written assignment: emphasis on retaining major concepts.
2. To challenge students to examine their own values regarding critical psychological issues and how their values are influenced by society.	2a. Evaluate psychological studies and weigh the evidence for conflicting views.	I. C. 1 II. D. III. E. IV. E. V. E	Lecture/Discussion
	2b. Examine the historical, current and future trends in the field of psychology.	I. C V. D. 1, 2	Lecture/Discussion
	2c. Explain how the nervous system works and how heredity and environment interact and influence behavior.	II. A. 1, 2 B. 1, 2 C. 2	Lecture/Discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To provide the opportunity for students to reflect their knowledge of the subject matter through reading and writing.	1a. Demonstrate in writing, basic understanding of the concepts and principles in psychology gained through assigned readings.	Throughout the entire course.	Reading and writing assignments: (skill building in reading for detail and constructing sentences and paragraphs)
	1b. Critically examine and creatively challenge in writing some of the common assumptions of personality development.	IV. C. 1, 2, 3 D. E.	Lecture/Discussion Written assignments: (skill building in organizing and summarizing information)

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners To Enhance Their Effectiveness in Thinking

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To encourage the ability to perceive and respond to data in a diversity of ways particular to the discipline of psychology.	1. Describe what psychologists have discovered about learning, memory, thought and perception and how they made these discoveries.	III. A. 1, 2, 3, 4 B. 1, 2, 3, 4, 5 C. 1, 2, 3, 4	Lecture/Slides Video-tapes
2. To increase the students' awareness of the complexities of the human condition.	2a. Examine and discuss the different ways people respond to the opportunities and problems encountered during the life cycle.	IV. C. 1, 2, 3 V. A. 1, 2, 3, 4 C. 1, 2 F.	Lecture/Discussion
	2b. Analyze stereotypical attitudes, myths, and beliefs in relationship to critical psychological issues.	I. E. II. D. III. E. IV. E. V. E.	Lecture/Discussion
3. To provide students with suggestions for improving memory and study habits, changing behavior and coping with change.	3a. Critically examine and creatively challenge some of the common assumptions of personality development.	IV. E	Lecture/Discussion Witten assignments: (skill building in making and defending judgements)
	3b. Discuss ways in which people acquire, organize, store and use information to solve problems and to create alternative processes.	III. B. 1, 2, 3, 4, 5	Lecture/Discussion Written assignments: (skill building in researching information)

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To provide the opportunity for students to become involved in the creative process.	1a. Develop a theory of personality. 1b. Complete exercises and/or processes on creativity.	IV. C. 1, 2, 3 D. III. B. 5	Written assignment: essay creativity exercise; Developing a group study process.
2. To offer students a new framework for viewing daily events.	2a. Critically examine and creatively challenge some of the common assumptions of personality development.	IV. C. 3 D.	Lecture/Discussion Written assignment: (skill building in making and defending judgements)
	2b. Develop their own processes for changing behavior.		Written assignment: short essay.
3. To provide students with diverse methods for improving memory and study habits, changing behavior and coping with change in order to express creativity.	3a. Develop alternative ways for improving memory, study habits, changing behavior or coping with change and apply such methods.	III. B. 1, 2, 3, 4, 5	Lecture/Discussion (skill building in problem-solving)
	3b. Discuss ways in which people acquire, organize, store and use information to solve problems and create alternative processes.	III. B. 1, 2, 3, 4, 5	Lecture/Discussion Slide presentation

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an impact on Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To increase the students' awareness of the complexities of the human condition.	1. Define and discuss the concepts and issues of racism, sexism and other stereotypical institutions as they relate to individual and group behavior and other topical psychological issues.	II. C. 2 D. III. F. IV. F. V. F.	Lecture/Discussion Slide presentation
2. To introduce the students to the concepts of diversity in race, sex and culture as related to the field of psychology.	2a. Discuss the diversity of race, sex and culture as they influence personality and behavior.	IV. F. V. F.	Lecture/Discussion Slide presentation Video-tape/films
	2b. Cite examples of the uniqueness of human response to societal issues that affect the quality and quantity of their existence.	III. E. F.	Films
3. To expand students' awareness of the ways in which people are different and why.	3a. Examine deviant types of behavior and techniques of therapy.	V. C. 1, 2 D. 1, 2	Lecture/Discussion Slide presentation
	3b. Critically examine and creatively challenge some of the common assumptions of personality development.	IV. E. F.	Lecture/Discussion Written assignment: (skill building in reacting to ideas; differentiating fact from opinion.

OTHER:

4. Texts and Other Instructional Materials

A textbook is required for general psychology that presents: theory and application to everyday problems/concerns; controversial thought on major psychological issues; and implications of race, gender role and culture with reference to critical topical issues. Current supplemental readings on critical issues will be made available as class handouts and/or available in the Learning Resource Center.

Audiovisuals to aide with various topical areas: slide-tape presentations, films, video tapes, filmstrips.

5. Evaluation Plan and Grading Plan

Evaluation Plan

Students' work will be evaluated by written assignments, essay examinations covering the entire content of the course. Examinations will test understanding of material and the meeting of the objectives as described under the objectives section of this outline.

Bases of evaluation

1. objective test questions
2. essay test questions
3. written assignments (focused on study skill; reading and writing skill development)

Grading Plan

Grades are based on a point system applied to test questions and assignments (% of total accumulated points possible).

A = 90%

B = 80%

C = 70%

D = 60%

F = 50%

6. Course Policies

1. The college policy on grading will be respected.
2. Attendance on a regular basis is required and expected of all students.
3. Grades will be assigned based on the quizzes and examinations, and any other work assigned by the instructor.
4. Reading and writing assessments will be conducted during the first week of the semester for the purpose of referrals to reading/writing lab(s), courses and tutorial assistance, as needed.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Behavioral Science 15LS

Introduction to Sociology

Course Author(s): Alex Sample

For full and part-time behavioral science instructors.

1. CATALOG DESCRIPTION

Title of Course:	Introduction to Sociology
Course Number:	Behavioral Science 15LS
Unit Value:	3 units
Mode of Instruction:	Lecture

Brief Description of the Course:

Introduction to the principles and theoretical perspectives of sociology. Topics will include: sociological research methods, culture, groups, collective behavior, urbanization, stratification, socialization, race and gender inequality.

Through various reading and writing exercises and assignments, students will be provided an opportunity to develop critical ways of looking at sociological phenomena. Through the examination of the various modes of inquiry used by behavioral scientists, students will be able to develop an awareness of the importance as well as the complexity of data collection and reporting.

Articulation Statement:

Transfers to U.C., C.S.U. and private colleges. Fulfills general education requirements at L.M.C and C.S.U.

2. OVERVIEW and RATIONALE

Overview

This course will present a comprehensive coverage of how individuals and groups of individuals develop frames of references for human relationships. The course will be organized into several units in which students will be provided the opportunity to see the world from a more analytical and critical perspective, rather than the world as seen from their own small circle of acquaintances and private, personal experiences. The content of the course will cover an examination of U.S. cultural patterns and ideals and how these vary from the cultural patterns and ideals of other cultures; the formation and maintenance of primary and secondary groups; the role that socialization plays on human development and subsequent human behavior; the critical analysis of collective behavior (e.g., riots, mass contagion, mass hysteria); the impact of racism and sexism on society; urbanization and population concerns in both the U.S. and underdeveloped countries; and the modes of inquiry used by sociologists and other behavioral scientists to collect and analyse data. Through various reading and writing exercises and assignments, students will be provided an opportunity to develop critical ways of looking at sociological phenomena such as ethnocentrism, racism and sexism. Through the examination of the various modes of inquiry used by behavioral scientists, students will be able to develop an awareness of the importance as well as the complexity of data collection and reporting.-

Rationale

This course is intended to make students aware of how everyday occurrences and events, often taken for granted, can influence human behavior. Since the study of human behavior involves many aspects of society, an intradisciplinary approach will be taken in this course. For example, the nation faces the highest unemployment rate since the depression. In order to understand this sociological phenomenon the student must first examine the political and economic climate of the nation. This will help the student understand the why? of unemployment. Second, the student can begin to examine the social consequences of unemployment through research methods employed by both sociologists and anthropologists (e.g., case study). Third, the student can explore the psychological impact of employment on the individual. By examining this social phenomenon through the use of related social and behavioral sciences, the student should be able to provide a critical evaluation of the issue.

By taking this course, the student will be able to see that society is constantly evolving and constantly producing new problems, perspectives, and ideas. This course will stress the basic concepts, techniques, and ethical problems of sociological investigation. Finally, this course will show students how a sociological awareness will enrich their everyday lives, will help them better understand other academic fields and be of permanent value as they pursue careers after college.

3.1 Course Content Goal

I. The Behavioral Sciences/The Social Sciences

  A. The relationship of other Behavioral and Social Sciences to the field of Sociology.

    1. Psychology and Sociology

    2. Anthropology and Sociology

    3. Economics and Sociology

    4. Political Science and Sociology

    5. History and Sociology

  B. The importance of other Behavioral and Social Sciences to the field of Sociology

  C. The differences and similarities between Sociology and other Behavioral Sciences

II. The Field of Sociology

  A. Its history as an academic discipline

    1. Auguste Comte

    2. Emile Durkheim

    3. Karl Marx

    4. Max Weber

    5. William Graham Sumner

    6. Robert Park

    7. Ernest Burgess

  B. Sociology and the Scientific Method

    1. Definition of the Scientific Method

    2. How to formulate a research question and hypothesis

    3. Importance of Operational Definitions

    4. Defining Independent Variables and Dependent Variables

    5. Research Methods

      a. The "Hawthorne effect" and its influence on research
      b. The Experiment
      c. Observation
      d. Participant Observation
      e. Survey Research
      f. The Case Study

3.1 Course Content Goal, continued

III. Culture, Social Control and Groups

   A. United States Society and Culture

      1. Cultural Ideals/U.S. and other cultures - Comparison
      2. Difference between Society and Culture
      3. Material Culture and Non-Material Culture
      4. Culture Trait
      5. Characteristics of Culture
      6. Importance of Symbols
      7. Sub-Cultures/Counter Cultures

   B. United States Norms and Values

      1. Distinction between norms and values
      2. Ethnocentrism
      3. Aspects of the American value system
      4. Cultural Relativism

   C. Groups and Formal Organizations

      1. The definition of group
      2. Types of groups
      3. Importance of groups
      4. Bureaucracy defined
      5. Max Weber's six characteristics of bureaucratic organizations
      6. Power defined
      7. Authority defined

IV. Socialization

   A. Theories of Human Development

      1. Behaviorism
      2. Cognitive Development
      3. Psychoanalytic Theory
      4. Symbolic Interaction

3.1 Course Content Goal, continued

B. Socialization during childhood

   1. Stories of Anna and Isabelle

C. Agents of Socialization and their influence on the individual

   1. The Family

   2. The School

   3. The Peer Group

   4. The Media

      a. Cultural Norm Theory
      b. Incidental Learning

D. Resocialization and Continuing Socialization

V. Collective Behavior and Social Movements

A. Collective Behavior defined

   1. Smelser's theory on Jonestown

B. Rumors defined

   1. Gordon Allport and The Rumor Process

   2. Theodore Caplow and The Rumor Process

C. Crowd Behavior

   1. Mass Contagion

   2. Mass Hysteria

   3. Crazes

D. Social Movements

   1. Theoretical Perspectives and Social Moments

      a. Absolute deprivation
      b. Relative deprivation
      c. Rising expectations
      d. J-curve hypothesis

VI. Race and Ethnicity

A. Race and Ethnicity defined

B. Prejudice and Discrimination defined - Reasons they exist

C. The consequences of minority/majority status

D. Minority reactions to majority acceptance and rejection

3.1 Course Content Goal, continued

- VII. Gender and Age Inequality
  - A. Gender differences and Socialization
  - B. Role Strain
  - C. Androgyny
  - D. Gender Inequality
  - E. Age Grading - Consequences
- VIII. Social Stratification
  - A. Consequences of Stratification
  - B. Status Consistency and Inconsistency
  - C. Social Mobility
    - 1. Class/Caste System
    - 2. Objective approach
    - 3. Subjective approach
    - 4. Reputational approach
    - 5. Class Hierarchy
  - D. Theories of Stratification
    - 1. Kingsley Davis
    - 2. Karl Marx
- IX. Population and Urbanization
  - A. Fertility trends in the United States
  - B. Mortality trends in the United States
  - C. World Population Problems
  - D. Urban Ecological Processes
    - 1. Natural Area
    - 2. Neighborhood
    - 3. Centralization
    - 4. Decentralization
    - 5. Segregation
    - 6. Invasion-Succession
    - 7. Patterns of Urban Growth

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. The course will provide students an opportunity to examine how sociology relates to other behavioral and social sciences and their approach to human behavior.	1.a. The student will be able to compare and contrast sociology with some of the other social/ behavioral sciences - psychology, economics, political science, history, and anthropology.	1. I. a, b, c	1. Lecture/Discussion Class will provide their definition of what each discipline concerns.
	1.b. The student will be able to discuss the contributions of key figures in sociological development of the discipline. The student will be able to understand some of the implications of knowledge from theories of these key figures.	1. II. a	
2. The course will provide students an opportunity to discuss how theories of development from psychology relate to theories of development from sociology.	2. The student will be able to explain how theories of the self, psychoanalysis, and cognition account for the development of the human personality.	2. IV. a.	2. Lecture/Discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
3. This course will provide students with an opportunity to examine how the modes of inquiry used by other behavioral sciences are employed by sociologists.	3.a. The student will be able to show how psychologists and sociologists use the same modes of inquiry.	3. II. b.	3. Lecture/Discussion Selected readings on research methods
	3.b. The student will be able to show how anthropologist and sociologists use the same modes of inquiry.	"	

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. This course will provide students the opportunity to see how sociologists and other behavioral scientists collect data in a scientific manner.	1.a. The student will be able to discuss the relationship between variables, hypotheses, and theories.	1. II. b.	1. Lecture/Discussion Reading Assignments on Research Procedure such as "Explaining a variable with another variable" Other selected readings on research such as the manual compiled by this instructor entitled: "The Research Process"
	1.b. The student will be able to discuss sample surveys, laboratory experiments and observations as ways to collect data.	"	
	1.c. The student will be able to discuss the scientific method and why sociologists employ it.	"	
	1.d. The student will be able to distinguish between a research problem and a research hypothesis and provide an example of each.	"	
	1.e. The student will be able to explain the research problem labeled "the Hawthorne Effect" and how researchers deal with it.		

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. This course will describe the elegance and beauty of how individual behavior relates to the social environment. (e.g., the socialization processes)	1.a. The student will be able to describe Cooey's "Look-Glass Self".	1. IV. a.	1. Lecture/Discussion Role Playing
	1.b. The student will be able to discuss George Herbert Mead's theory of "self" development.	"	"
	1.c. The student will be able to compare and contrast Freud's theory of personality development with Mead's theory of "self" development.	"	"
	1.d. The student will be able to, using the concept socialization, account for differences as well as similarities among society's members.	"	"

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
2. This course will demonstrate the process of how human ideas are molded by social influence.	2.a. The student will be able to identify the "agents of socialization" and how these "agents" relate to human behavior.	2. IV. b. c. d.	2. Lecture/Discussion Readings on the influence of the mass media on human behavior; Readings on Resocialization
	2.b. The student will be able to define socialization as the process by which people learn the skills and attitudes needed to play social roles.	"	The student will monitor selected media in order to help the student better understand how the media influences us as an agent of socialization
	2.c. The student will be able to understand how socialization perpetuates society and enables the individual to survive in society.	"	Role Playing Value Clarification
	2.d. The student will be able to discuss continuing socialization and resocialization.	"	

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore these Implications of the Knowledge of the Discipline: Values, Ethics and Future.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. This course will provide students with an opportunity to examine the consequences of cultural variability on ethnocentrism and cultural misunderstandings.	1.a. The student will be able to define culture and understand how culture gives meaning and structure to human life.	1. III. a. b. c.	1. Lecture/Discussion The student will write a short description of how they would describe one of our cultural traits to a "person from Mars" (e.g., smoking)
	1.b. The student will be able to understand the relation between culture and socialization.	"	
	1.c. The student will be able to discuss cultural universals, cultural relativity and ethnocentrism.	"	
	1.d. The student will be able to identify traditional American values and how these values influence behavior.	"	
	1.e. The student will be able to identify the key features of a subculture and counterculture.	"	
	1.f. The student will be able to discuss the difference between norms and values.		

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
2. The course will encourage students to maintain a balanced perspective on the relationship of a social phenomenon to human values. For example, most individuals perceive bureaucracies as an unmitigated social "evil." This course will help students see bureaucratic procedure as a device for ensuring social justice as well as technical efficiency.	2.a. The student will be able to define "organization."	2. III. c.	2. Lecture/Discussion (e.g., video tape S. Dornbush "Living in World of Organizations)
	2.b. The student will be able to outline the main features of bureaucracy as defined by Max Weber.	"	
	2.c. The student will be able to explain the "real" and "ideal" bureaucracy.	"	

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. This course will provide the student with the opportunity to study their own value structure through reading and writing assignments.	1.a. The student will be able to compare and contrast their values about gender differences with other class members	1a. VII. a.	1. Some examples: The student will write about how they see the roles of males and females in our society.
	1.b. The student will be able to define and give examples of ethnocentrism and examine how their values relate to feelings of ethnocentrism.	1b. III. b.	The student will write and discuss in class how their values relate to ethnocentric attitudes in America.
2. This course will provide the student with reading material taken from newspapers and national magazines to demonstrate how the concepts discussed in class pertain to "real life" situations.	2. The student will be able to discuss how supplemental reading assignments relate to the concepts being discussed in class. (e.g., Discrimination in Pittsburg and Racism in America)	2. Supplemental reading assignments will be made at various points in the course.	2. Class discussion of reading assignments.

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
3. This course will provide the student an opportunity to identify their reading and writing skills. Students needing help will be provided with tutoral help.	3. The student will be given a reading and writing exercise at the beginning of the semester to assess skill level.	3. Beginning of the course.	3. Reading material selected from course.

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. This course will provide the student with an opportunity to critically examine the process of collective behavior.	1.a. The student will be able to define collective behavior and note the features that set it off from routine behavior.	1. V. a. b. c.	1. Lecture/Discussion Class Exercise on the Rumor Process
	1.b. The student will be able to discuss theories of collective behavior including contagion and convergence theories.	"	Selected media
	1.c. The student will be able to discuss the rumor process; mass hysteria; and riots.	"	
	1.d. The student will be able to define the term social movement and describe the role of ideology in social movements.	"	
	1.e. The student will be able to discuss countermovements and how they relate to social movements.		

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
2. This course will allow the student an opportunity to critically examine the dynamics of populations.	2.a. The student will be able to understand the nature of demography and the relevance of population growth to social change.	2. IX. a. b. c. d.	2. Lecture/Discussion Readings - (e.g., World Population; the Population Time Bomb). Video Tape - (e.g., World Population Problems.)
	2.b. Analyze the components of population in terms of age, sex, marital status, patterns of settlement, and other factors.	"	
	2.c. Examine basic factors in population change, including fertility, mortality, and migration.	"	
	2.d. Discuss the consequences of population growth and world hunger.	"	

OTHER:

3.2 **Criteria Related** Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. This course will allow students to speculate on the direction of future American cultural change.	1.a. The student will be able to discuss how fads influence American cultural change.	1. III. b.	1. Lecture/Group Discussion on Fads. Writing assignment on Fads and cultural change
	1.b. The student will be able to discuss how previous American fads have influenced American society.		
	1.c. The student will be able to speculate on future American fads and cultural change.		
2. This course will allow students to speculate on if and when the U.S. will experience full sexual equality.	2.a. The student will be able to define and describe the traditional bases of sex differences in terms of gender identity, gender ideals, and sex roles in America.	2. VII. a. b. c. d.	2. Lecture/Class Exercises Group Discussion on sex roles writing assignments on gender differences
	2.b. The student will be able to discuss how gender differences relate to sexual equality and inequality.		
	2.c. The student will be able to speculate on the future of sexual equality in the U.S.		

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
3. This course will allow the student to speculate on the prospects for ethnic and racial equality in the U.S.	3.a. The student will be able to outline the history and conditions of major racial and ethnic groups in the U.S. 3.b. The student will be able to speculate about the future of majority/minority relations in the U.S. and why. 3.c. The student will be able to discuss the consequences of social differentiation and describe how it leads to the formation of stereotypes. 3.d. The student will be able to define prejudice and explain how it influences an individual's thought processes.	3. VI. a. b. c. d.	3. Lecture/Discussion Class Exercises (e.g., Movie - Bill Cosby on Prejudice)

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. This course will provide the opportunity for students to examine subcultures in American society and to understand how these subcultures influence society.	1.a. The student will be able to define the terms "ethnic group" and "race" and relate the two concepts to one another.	1. VI. a. b. c. d.	1. Lecture/Discussion Selected Video Tapes on majority/minority relations followed by small/large group discussions
	1.b. The student will be able to describe various forms of group domination, such as prejudice, discrimination and institutional racism and how these relate to subcultures		
	1.c. The student will be able to describe the processes of assimilation, pluralism, expulsion, genocide and exclusion and how these relate to minority/majority relations		
	1.d. The student will be able to show how subcultures, language, and countercultures produce cultural diversity.		

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, experiences and Persuasions that have an Impact on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
2. This course will provide the opportunity for students to understand the components of inequality in terms of wealth, power, and prestige.	2.a. The student will be able to compare and contrast various theories of inequality.	2. VIII. a. b. c. d.	2. Lecture/Discussion Class Exercises (e.g., exercise on Social Stratification)
	2.b. The student will be able to discuss the factors associated with status attainment.	"	
	2.c. The student will be able to explain the difference between vertical and horizontal mobility.	"	

OTHER:

4. Texts and Other Instructional Materials

Required Textbook:

Introduction to Sociology

5. Evaluation and Grading Plans

EVALUATION PLAN

Students will be evaluated by examinations. The examinations will be given at the conclusion of each assigned unit. Examinations will consist of both objective and essay questions.

GRADING PLAN:

Grades will be assigned based on the completion of all examinations, individual projects, or other outside classroom assignments.

The first week handout on grading and evaluation will detail specific grading breakdown.

GRADES WILL BE BASED ON:

90% of total possible points = A

80% of total possible points = B

70% of total possible points = C

60% of total possible points = D

Less than 60% " " = F

6. Course Policies

State course policies, such as attendance, fees, materials, expectations regarding such activities as field trips, practicum, projects, and the like.

Reading/writing assessment. Exercises to assess student's reading and writing abilities will be administered at an appropriate time during the first weeks of class. Where appropriate, students will be referred for assistance by the class tutor or other resources.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Behavioral Science 16LS
Introduction to Social Problems

Course Author(s): Alex Sample

For full and part-time behavioral science instructors.

1. CATALOG DESCRIPTION

Title of Course: Introduction to Social Problems

Course Number: Behavioral Science 16LS

Unit Value: 3 units

Mode of Instruction: Lecture

Brief Description of the Course:

A sociological analysis of some of the major societal problems in the United States. Topics covered will be taken from a range of possible social issues such as crime, juvenile delinquency, violence, racism, sexism, rapid social change, poverty, educational problems, family stress, urbanization, and variations in human sexuality.

Students will be provided an opportunity to discuss reasons and possible solutions to social problems in an intradisciplinary and scientific manner. Reading and writing assignments will help students evaluate the social problems in a critical manner.

Articulation Statement:

Transfers to U.C., C.S.U., and private colleges. Fulfills general education requirements at L.M.C. and C.S.U.

2. OVERVIEW and RATIONALE

Overview

This course is intended to introduce students to some of the major social problems confronting American society. The course will be organized into several units in which students will be provided the opportunity to read and discuss various social issues from the prespectives of sociology, psychology and anthropology. Some of the social issues that will be discussed are the decaying city and environmental deterioration; the workings of the criminal justice system and the problems confronting its three components - the police, the courts, and corrections; the phenomenon of racism in contemporary American society; the minority status of women in America; and the variations in American human sexuality

The course will also acquaint students with how power plays an important role in the life cycle of a social problem. How public acceptance of a given definition of a social problem depends in part on the defining individual's or group's ability to mobilize support and implement their desires. Although students will examine social problems in the context of American society, through various readings students will have an opportunity to investigate what is being done about similar social problems worldwide. Each student will be required to complete a project on some aspect of an American social problem.

Rationale

Since the industrial revolution, the United States has undergone considerable social change. Much of this social change has been the product of technological advances. Although these technological advances have made our lives comfortable, many have created social problems. For example, the automobile provides us with convenience, but it has also been a factor in urban and environmental deterioration.

This course will examine the origins of many of our contemporary social problems. Students will be provided an opportunity to discuss reasons and possible solutions to social problems in an intradisciplinary and scientific manner. Reading and writing assignments will help students evaluate the social problems in a critical manner.

The final goal of this course is to provide the student with a conceptual framework for looking at contemporary social problems. The course will systematically discuss the sociological perspective on social problems and try to convey the information generated by the research of outstanding sociologists and others who work in the related fields.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. The Behavioral Sciences/The Social Sciences

A. The relationship of other Behavioral and Social Sciences to the field of Sociology.

1. Psychology and Sociology
2. Anthropology and Sociology
3. Economics and Sociology
4. Political Science and Sociology
5. History and Sociology

B. The history of Sociology as an academic discipline

1. Auguste Comte
2. William Graham Sumner
3. Robert Park
4. Ernest Burgess

C. Sociology and the Scientific Method

1. Definition of the Scientific Method
2. Formulating research questions and hypotheses
3. Understanding operational definitions
4. Defining Independent Variables and Dependent Variables

D. Research Methods

1. The Experiment
   a. The "Hawthorne effect"
2. Observation
3. Participant Observation
4. Survey Research
5. The Case Study

II. The Study of Social Problems

A. What is a Social Problem?

B. Social Problems and Values

C. Theoretical Approaches to the study of Social Problems

D. Social Change and Social Problems

3.1 Course Content Goal, continued

III. The Decaying City

  A. Pros and Cons of city life

    1. The social psychology of city life

  B. The Central City

    1. Discrimination and isolation of the poor
    2. Concentration of minorities and non-white populations
    3. Programs of urban renewal and rehabilitation

  C. Economic Relocation

    1. Relocation of industries
    2. Racism and white flight to the suburbs

IV. Environmental Deterioration

  A. Urbanization and industrial activity as sources of environmental deterioration

  B. The cost of a healthy environment = both values and money

  C. The atomic waste problem

  D. The environmental movement

V. The Criminal Justice System

  A. Defining Crime and Deviant Behavior

  B. Explanations for Criminal Behavior

    1. Biological Explanations
    2. Psychological Explanations
    3. Sociological Explanations

  C. Responses to Crime

    1. The Police
    2. The Courts
    3. The Prison System
      a. "Pathology of Imprisonment"
      b. Rehabilitation within the prison - does it exist?
      c. Contemporary Prisons

3.1 Course Content Goal, continued

VI. Prejudice and Discrimination

  A. Defining prejudice and discrimination

  B. The nature of discrimination in American society

    1. Racial discrimination
    2. Ethnic discrimination

  C. Reasons for prejudice and discrimination

  D. The impact of institutional racism on American Society

VII. Variations in Human Sexuality

  A. Origins of today's attitudes about sex

  B. Homosexuality

  C. Prostitution

  D. Pornography

VIII. Sex Roles and Inequality

  A. Traditional sex roles

  B. Sexism and Stereotyping

  C. Sources of Sexism

  D. The changing role of women in American society

3.2 Criteria Related Goals: Criteria Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. This course will acquaint the student with how sociology relates to the other Behavioral/Social Science disciplines	1. The student will be able to list ways in which the discipline of sociology overlaps with other Behavioral and Social Science disciplines	1. I. A, B	1. Lecture/Class Discussion (e.g., student might discuss in class their perceptions of how sociology overlaps with other disciplines
2. This course will provide the student an opportunity to understand the "psychology of City Life."	2. The student will be able to discuss how city living may or may not have some psychological impact on urban residents	2. III. A	2. Lecture/Readings on the "Psychology of City Life" by such writers as Stanley Milgram (1970)
3. This course will provide the student an opportunity to compare/contrast the biological, sociological, and psychological explanations of criminal behavior.	3. The student will be able to list at least one theory of criminal behavior related to a biological, sociological, and psychological perspective.	3. V. A, B	3. Lecture/Discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in foal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. This course will expose the student to sociology as a method of gaining knowledge about human behavior. The course will examine how sociologists search for knowledge, the methods and techniques they use, and some of the problems they encounter.	1.a. The student will be able to define sociology and list the major ideas of some early sociologists (Comte, Sumner, Park and Burgess)	1. I. C.	1. Lecture/Discussion Readings on understanding variables. The student will use the manual compiled by this instructor entitled: "The Research Process" available in the Learning Center.
	1.b. The student will be able to describe the steps of the scientific method.	"	
	1.c. The student will be able to describe the advantages and disadvantages of laboratory studies, field studies, participant observation, surveys and case studies.	"	
	1.d. The student will be able to explain the difference between an experimental group and a control group.	"	
	1.e. The student will be able to define a variable and tell how to determine the difference between one which is independent and one which is dependent.	"	

OTHER

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline	INSTRUCTIONAL Procedures/Materials
2. This course will provide the student an opportunity to discuss what is a social problem.	2.a. The student will be able to give a clear and concise definition of the term "social problem."	2. II. A, B, C, D	2. Lecture/Discussion of the personal values of class members and how their values influence social change.
	2.b. The student will be able to identify and discuss the guidelines of the scientific approach to the study of social problems.	"	
	2.c. The student will be able to discuss the role of "values" in the study of social problems.	"	

OTHER

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. This course will examine the elegance and beauty of how behavioral scientists construct theories of criminal behavior.	1.a. The student will be able to explain how the theory related to "pathology of imprisonment" was constructed through experimental research.	1. V. A, B, C	1. Lecture/Readings on the "pathology of imprisonment" and other selected works of Behavioral Scientists
	1.b. The student will be able to discuss the "anomie" theory of criminal behavior.	"	
	1.c. The student will be able to discuss how "labeling" theoretically influences criminal behavior.	"	"
	1.d. The student will be able to discuss the "differential association" theory of criminal behavior.	"	"

OTHER

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS		OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.		(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
2. This course will examine the difference between social issues (those "misfortunes" which are seen as "injustices" in the public mind) and social problems (those social conditions that are found to be harmful to the individual and/or societal well-being).	2a.	The student will be able to distinguish social issues from social problems and determine how they are interconnected.	2. II. A, B, C, D	2. Lecture/ Discussion
	2b.	The student will be able to discuss the meaning of "justice" and "equality" and how these concepts relate to identifying and solving social problems.	"	"

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline	INSTRUCTIONAL Procedures/Materials
1. This course will provide the student with an introduction to the phenomenon of racism in contemporary American society.	1.a. The student will be able to discuss how racism and white flight have created decaying cities.	1a. III. B, C	1a. Lecture/Class discussion on race, prejudice and discrimination
	1.b. The student will be able to show how institutional racism has lead to institutional discrimination.	1b. VI. A, B, C, D	1b. Selected media readings on discrimination in the S.F. Bay Area.
	1.c. The student will be able to discuss racism and crime.	1c. V. A, B, C	1c. Lecture/Discussion
2. This course will expose the student to the causes and consequences of environmental abuse.	2.a. The student will be able to identify the advantages and disadvantages of nuclear power.	2. IV. A, B, C, D	2. Lecture/Group Discussion (e.g., Class Debate on nuclear power) Selected Media Writing exercise on the role of values and environmental deterioration
	2.b. The student will be able to evaluate the role of technology and technological change in the creation of many of our environmental problems.	"	
	2.c. The student will be able to identify the dominant attitudes and values within our society that have played a major role in generating our current environmental crisis.	"	

OTHER

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
	2.d. The student will be able to discuss some steps that should be taken by the government in order to more effectively deal with our environmental problems.	2d. IV. A, B, C, D	2. Lecture/Group Discussion (e.g., Class Debate on nuclear power) Selected Media Writing exercise on the role of values and environmental deterioration
	2.e. The student will be able to list various ways in which large-scale environmental education programs could be of assistance in improving the quality of our enviornment.	"	
3. This course will allow the student an opportunity to evaluate the "sexual revolution" in the United States.	3.a. The student will be able to discuss how American attitudes and behavior toward sex have changed.	3. VII. A, B, C, D	3. Lecture/Discussion Selected Media Readings on topics discussed. Group discussion of the role of values and the "sexual revolution.
	3.b. The student will be able to discuss why pornography is a rapidly growing industry.	"	
	3.c. The student will be able to discuss some American attitudes toward homosexuals.		
	3.d. The student will be able to discuss both traditional and contemporary explanations for homosexual behavior.		

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognative Skills Through Reading and Writing

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. This course will provide the student an opportunity to identify their reading and writing skills. Students needing help will be provided with tutorial help.	1. The student will be given a reading and writing exercise at the beginning of the semester to access skill level.	1. Beginning of the course.	1. Reading material selected from course.
2. This course will provide the student with reading material taken from newspapers and national magazines to supplement the textbook on the discussion of social problems	2. The student will be able to discuss how the assigned reading material relates to the discussed social problem	2. Supplemental reading assignments will be made at various points in the course	2. Class discussion of reading assignments
3. This course will allow the student to write and discuss their solutions to American social problems	3. The student will be able to list some solutions to each discussed problem	3. At various points in the course, students will be asked to write and discuss their solutions to the social problems discussed in class	3. Group Discussion. Writing Exercise (e.g., Students will write their solutions to the urban crisis) Each student is required to complete a project on some social problem

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
1. This course will allow the student to explore the minority status of women in America and to propose creative solutions for change	1.a. The student will be able to explain the traditional view of women in American culture in terms of behavior, temperament, and intelligence	1. VIII. A, B, C, D	1. Lecture/Selected Media/Class Exercises on Attitudes about American women
	1.b. The student will be able to discuss prejudice and discrimination in relation to women's jobs, salaries, and education.	"	"
	1.c. The student will be able to discuss why the Equal Rights Amendment was defeated and speculate on the future success of such an amendment	"	"
	1.d. The student will be able to propose several solutions for changing the minority status of women in America	"	"
2. This course will provide the student an opportunity to critically examine how society responds to deviant behavior and explain when and why deviance becomes a social problem	2.a. The student will be able to outline several explanations of deviant behavior.	2. V. A	2. Lecture/Class Discussion of Deviance
	2.b. The student will be able to define "tolerance limits" and describe their relationship to deviant behavior.	"	
	2.c. The student will be asked to describe the effects of culture and time on social definitions of deviance.	"	"
	2.d. The student will be able to discuss the effects of age, sex, social rank, and other characteristics on tolerance limits.	"	"

OTHER

3.2 Criteria Related Goals· Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. This course will allow the student an opportunity to create ways to bring about social change in the area of American race relations.	1.a. The student will be able to define prejudice and explain how it influences an individual's thought processes.	1. VI. A, B, C, D	1. Lecture/Discussion and writing exercises on American racial attitudes - Group discussions (Brainstorming) on how to change attitudes about race.
	1.b. The student will be able to speculate on ways to bring about changes in American racial attitudes.	"	
2. This course will allow the student an opportunity to propose solutions to problems faced by the American prison system.	2.a. The student will be able to identify the major reasons for the contemporary shift from institutionization of offenders to the use of community-based correctional programs.	2. V. 3. A, B, C	2. Lecture/Group Discussion (Brainstorming) on changing the prison system Selected Media Possible field trip to a prison
	2.b. The student will be able to discuss the retribution - deterrence response to crime	"	
	2.c. The student will be able to suggest new or modified solutions for the American prison system.	"	

OTHER

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
3. This course will allow the student an opportunity to examine and propose ways of bringing about social change in the area of environmental deterioration	3.a. The student will be able to discuss several approaches to the environmental problem.	3. IV. A, B, C, D	3. Lecture/Group Discussion (Brainstorming) on how to change American attitudes and values about the environment.
	3.b. The student will be able to discuss the impact of pollution on the quality of life today.	"	
	3.c. The student will be able to identify ways in which American attitudes and values about the environment will have to change.	"	

OTHER

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. This course will allow the student an opportunity to examine how the unequal distribution of wealth and income has created urban problems.	1.a. The student will be able to discuss how some of the problems for the cities have been caused by the development of suburbs.	1. III. A, B, C	1. Lecture/Class Discussion of urban problems Selected Media
	1.b. The student will be able to identify several different life-styles of inner-city residents.	"	"
	1.c. The student will be able to summarize the effect of urban renewal and urban revitalization.	"	"
2. This course will allow the student an opportunity to compare the assimilation process of white ethnics in America with racial groups in America.	2.a. The student will be able to identify why certain ethnic groups were able to assimilate into American society and other ethnic groups and/or racial groups have been unable to do so.	2. VI. A, B, C, D	2. Lecture/Class Discussion Selected Media
	2.b. The student will be able to discuss the social mobility gains of blacks and other minorities in education, economics, and political power.	"	"

OTHER

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
3. This course will allow the student an opportunity to discuss the nature of sex differentiation in American society.	3.a. The student will be able to contrast the sex roles of the American female and the American male.	3. VIII. A, B, C, D	3. Lecture/Class Discussion of American sex roles. Role Playing
	3.b. The student will be able to discuss how the mass media helps reinforce old stereotypes of women.	"	"
	3.c. The student will be able to identify how sex roles are maintained by traditional patterns of socialization	"	"

OTHER

4. Texts and Other Instructional Materials

Required Text(s):

Social Problems

Recommended Text(s)

None

Other Instructional Materials:

None

5. Evaluation and Grading Plans

EVALUATION PLAN

Students will be evaluated by examinations. The examinations will be given at the conclusion of each assigned unit. Examinations will consist of both objective and essay questions.

GRADING PLAN:

Grades will be assigned based on the completion of all examinations, individual projects, or other outside classroom assignments.
The first week handout on grading and evaluation will detail specific grading breakdown.

GRADES WILL BE BASED ON:

90% of total possible points = A

80% of total possible points = B

70% of total possible points = C

60% of total possible points = D

Less than 60% " " = F

6. Course Policies

State course policies, such as attendance, fees, materials, expectations regarding such activities as field trips, practicum, projects, and the like.

Students will be expected to attend class regularly and punctually. Students will be expected to purchase class materials, such as textbooks, deemed appropriate by individual instructors.

Reading/writing assessment. Exercises to assess student's reading and writing abilities will be administered at an appropriate time during the first weeks of class. Where appropriate, students will be referred for assistance by the class tutor or other resources.

Students will be expected to monitor the local and national news and selected television programs as a means of keeping informed of relevant sociological issues.

2.2 Biological Science

2.2.1 Biological Science 5LS: Health Biology

2.2.2 Biological Science 10LS: General Biology

2.2.3 Biological Science 20LS: Principles of Biology

2.2.4 Biological Science 25LS: Ecology

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: **Biological Sciences** 5LS

Health Biology

Course Author(s): Chris Meek

For full and part-time biological science instructors.

1. CATALOG DESCRIPTION

Title of Course:	Health Biology
Course Number:	5 LS
Unit Value:	3 units
Mode of Instruction:	3 hour lecture/1 hour laboratory

Brief Description of the Course:

An introduction to the biological concepts and principles underlying human health through the study of stress, nutrition, physical fitness, disease, death and dying, environmental health and sexuality.

An intradisciplinary approach will be used to foster a lifelong understanding of human development and of human beings as integrated social, psychological, and physiological entities. The creative process of scientific inquiry, the aesthetics of science, and the implications of scientific knowledge will be emphasized, as will skills in critical thinking, problem solving, and effective learning. Included will be a fitness activity component.

Articulation Statement:

Transfer: U.C. C.S.U.C. (General Education: Area E)

2. OVERVIEW and RATIONALE

Overview

This course seeks to introduce fundamental biological concepts and principles through an application to human health. An intradisciplinary approach will be taken since human health will be developed from the perspective of the balance of biological, psychological, and social aspects of human life. It is the purpose of this course to provide a foundation for students to use biological principles to evaluate their own health practices.

The first unit will explore the topic of stress and consequently lead into the second unit for the development of systemic understanding of the human body. The systemic interrelationships within the human body will be then highlighted within a treatment of the topics of nutrition and fitness. The next phase will develop an understanding of the interactions and effects of biological, chemical and nuclear agents upon the human body in terms of disease and environmental health. Finally, the last phase will be an integrative exploration of human sexuality, genetics and development in terms of four major life cycles: birth, growth, maturation and death. Incorporated within these topics will be the significant biological concepts and principles associated with evolution, heredity, structure/function, homeostasis, bioenergetics and development.

In addition this course will develop an understanding of the process of scientific inquiry and the creative aspects of science. Throughout the course, critical thinking and the associated reading and writing processes will be incorporated into the learning activities by means of lectures and class exercises.

Rationale

This course was designed to fulfill the requirements and criteria for the Tier One General Education Model at Los Medanos College. The general education focus of this course allows the student to understand and develop themselves as integrated physiological, social, and psychological human beings. Knowledge of the scientific method will aid the student in unraveling the "mystery" of science and to realize the implications of such scientific discoveries as genetic engineering and "test-tube" babies. The student will examine the human body at the smallest functional unit, the cell, and as the organization of matter increases from cell to individual, the student will appreciate the beauty and complexity of bodily design. The student will also study the human life cycle from the fertilized egg to the mature, aging adult and will look at the influence of stress, diet, physical fitness, disease, sexuality, and environment on the individual's evolution. With this knowledge the student will be able to make wise decisions about his/her health. The concepts and principles developed throughout this course are intradisciplinary to the biological sciences and are treated in General Biology, Ecology, and Principles of Biology.

3.1 Course Content Goal

I. Stress

A. Definition of stress

B. Why Is Stress a "problem" In This Society?

1. evolutionary heritage
2. societal pressures
3. population pressures

C. Characteristic Response to Stress - General Adaptation Syndrome

1. stage of alarm
2. stage of resistance
3. stage of exhaustion

D. Physiology of Stress

1.

    a. structure
    b. function

2. Endocrine system

    a. structure
    b. function

3. Other systems affected

E. Stress Management/Coping

1. Why manage stress?

    a. contribution of stress to illness
    b. contribution of stress to societal problems

2. Ways of dealing with stress

    a. psychological

        (1) biofeedback
        (2) meditation
        (3) visualization

    b. physical - exercise

    c. chemical - drugs

        (1) alcohol as an example

            (a) physiological effects
            (b) psychological effects
            (c) social effects

        (2) The scientific method as used in research; as an example drug research

3.1 Course Content Goal, continued

F. Personal Evaluation

1. Type A/Type B behavior
2. Life change index

II. Organization of the Human Body

A. Cells

1. cell components
2. cellular duplication
3. cellular processes

B. Tissues, Organs

C. Systems

1. respiratory
2. circulatory
3. excretory
4. digestive
5. muscular
6. skeletal
7. reproductive
8. nervous
9. endocrine

D. The Individual

III. Personal Health Care

A. Nutrition

1. Components of food

   a. carbohydrates
   b. proteins
   c. fats
   d. vitamins
   e. minerals

2. Digestive system and its enzymes

3. Energy relationships

   a. basal metabolic rate
   b. cellular respiration

4. Food controversies

   a. table salt
   b. sugar

3.1 Course Content Goal, continued

5. Food additives
    a. artificial coloring
    b. artificial flavoring
    c. artificial sweeteners
6. Food Residues
    a. Pesticides
        (1) effect on the food chain
        (2) biological magnification
    b. Alternatives to pesticides
7. Dietary Changes Throughout Life

B. Weight Management
    1. components
    2. health hazards of being overweight

C. Fitness
    1. Muscular system
        a. "fast twitch" fibers
        b. "slow twitch" fibers
    2. Skeletal system
    3. Elements of fibers
        a. stamina
        b. strength
        c. suppleness
    4. Cellular respiration
        a. aerobic
        b. anaerobic
    5. Fitness programs

3.1 Course Content Goal, continued

IV. Disease

A. Causes of Disease

1. diet
2. environment
3. infections agents
4. heredity
5. stress
6. degeneration

B. Communicable Diseases

1. Causes

    a. virus
    b. bacteria
    c. rickettsia
    d. parasites
    e. worms
    f. fungus

2. Sexually-transmitted diseases

    a. syphilis
    b. gonorrhea
    c. herpes simplex II
    d. other

3. Body Defenses

    a. skin
    b. respiratory system
    c. digestive system
    d. blood cells
    e. immune system

4. Artificial Defenses

    a. vaccines and other types of immunizations
    b. antibiotics
    c. other drugs

C. Cancer

1. Definition - lack of hoemostasis

2. Causes

    a. radiation
    b. viruses
    c. chemical

        (1) smoking cigarettes

    d. environment

3.1 Course Content Goal, continued

3. Prevention of Cancer

   a. societal influences

      (1) money for research
      (2) control over cancer-producing activities

   b. individual precautions

4. Detection of cancer
5. Treatment of cancer

D. Cardiovascular Disorders

1. Circulatory system review
2. Atherosclerosis

   a. Causes
   b. Treatment

V. Environmental Health

A. Introduction

1. Human influences on the environment

   a. air
   b. water
   c. land

2. Does society value a "clean" environment?

B. Air Pollution

1. photochemical smog
2. thermal air inversion
3. acid rain
4. health effects of air pollutions

   a. lung cancer
   b. emphysema
   c. bronchitis
   d. ecosystem destruction

C. Water Pollution

1. sewage treatment
2. chemical/toxic wastes
3. drinking water quality
4. health effects

   a. communicable diseases
   b. cancer

3.1 Course Content Goal, continued

D. Chemical Pollution

1. pesticides
2. herbicides

E. Nuclear Weapons

1. effect on ozone layer
2. effect on human health
3. effect on all life

VI. Human Sexuality

A. What is Sexuality?

1. definition
2. sex roles/stereo types/cultural conditioning
3. changing society and sexuality

B. Anatomy and Physiology of Male/Female

1. structure and function
2. research on influence of sex hormones

C. Sexual Arousal and Response

D. Control of Birth - A recent change in societal values

1. chemical means
2. mechanical barriers
3. rhythm
4. sterilization
5. abortion: right or wrong?
6. other

E. Heredity and genetics

1. Genetic composition

    a. DNA
    b. composition of genes

2. Reproduction of sex cells - meiosis

3. Terminology of genetics

4. Types of inheritance patterns in human populations

    a. simple autosomal
    b. sex-linked
    c. genetics problems - process of solving them

5. Genetic Engineering: Control of population characteristics?

3.1 Course Content Goal, continued

F. Human Development

1. stages of development
2. ethical implications of "test-tube" babies

VII. Life Cycles

A. Birth

B. Growth

C. Maturation/Aging

D. Death and Dying

1. Implications of euthanasia

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To consider how the structure of a cell dictates its function in the human body.	1. To identify the types of cells and their function in the human body.	II. A.	Class discussion/audio-tutorial assignment on cell types.
2. To learn the types of body systems, their function, and their interrelationships.	2. To recall the general parts of the body systems, the function of each, and how each part relates to another.	II. C.	Class discussion. Five minute class writing exercise.
3. To understand what the human body needs in order to maintain homeostasis.	3. To identify the feedback systems which try to maintain homeostasis.	I. D. 1, 2, 3	Class demonstration of biofeedback using equipment in science lab.
4. To understand what are the characteristics of each stage of the human life cycle.	4. To discuss the process of human development, birth, aging and death.	VI. F. VII. A.-D.	Audiotutorial assignment on human development and the birth process.
5. To recognize what are basic human life needs.	5. To discuss what are basic human physical and emotional needs.	III. A., C. VI. C	Class discussion - Film: Alcoholism: A Model of Drug Dependency

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
6. To investigate how the human body takes in energy and uses it in the life process.	6. To identify the process of digestion.	III. A. 2-3 III. C. 4	Exercise: Trace the physiological effects of eating a hamburger for lunch. How is it broken down? Where does it go? Is it stored? What are the end products?
7. To understand aerobic and anaerobic respiration.	7. To recall the process of aerobic and anaerobic respiration in the body.	III. C. 4	Fitness activity in which aerobic and anaerobic respiration is demonstrated
8. To understand basic principles of inheritance.	8. To work out simple inheritance and sex-linked inheritance problems.	VI. E.	Classroom exercise.
9. To investigate the role of DNA in genetics.	9. To recognize the structure and function of DNA in human cells.	VI. E.	Film: "The Blueprint of Life"

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To consider the scientific method as a procedure for discovering the inner workings of the human being.	1. To discuss the use of the scientific method in health biology.	I. E. c.	Class discussion on how drugs are discovered and tested. Exercise: collect data from class on sex, weight, amount of alcoholic consumption/day (beer equivalents). Organize data to see if patterns develop. Might see men drinking more than women. Develop theory why? Correlation between weight and sex - men can physiologically drink more as weigh more (more blood t dilute alcohol). Exercise gets people's attention and is fun.
2. To develop the use of one's senses.	2. To use one's senses in gathering information.	Emphasized throughout the course.	
3. To place data into catagories.	3. To classify information obtained through observation.		
4. To recognize patterns in the data.	4. To observe that patterns might exist in the data.		
5. To develop a model that fits the observed phenomena.	5. To formulate a hypothesis or theory from observed patterns.		
6. To notice any limits in the scientific method.	6. To examine possible limits to the scientific method as a technique for understanding the human body.		Class discussions.

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge ___.___

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To introduce the student to the incredible design of the human body.	1. To evaluate the design of the human body.	II. C.	Videotape: "The Incredible Machine"
2. To show the miracle of human development up until birth.	2. To recall the stages of prenatal development and the processes occurring at each stage.	VI. F.	Exercise in science lab: View models of human prenatal development and do research on the development of cells, tissues, organs, and systems through the nine month period.
3. To introduce the student to the interconnectedness of all the body systems.	3. To evaluate the interconnectedness of the body systems and to discuss why the human body is put together the way it is.	II. D.	Assignment: Write a one page paper on the elegant design of the human body.

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To consider the discovery of drugs both as a cure as well as a harm to human health.	1. To discuss the use and abuse of drugs in this society.	I. C.	Class discussion.
2. To recognize the discovery of DNA as a turning point in biological research.	2. To evaluate the advantages and disadvantages of genetic engineering.	VI. E. 5	Class discussion.
3. To consider the impact of nuclear weapon deployment on the future of life on earth.	3. To argue a point of view regarding the effects on human health if nuclear weapons are used.	V. E.	Individual research on the health effects of nuclear weapon deployment. Debate in class.
4. To consider euthanasia as a method of terminating human life.	4. To discuss the ethical implications of euthanasia.	III. D. 1	Case studies for small group discussion.
5. To consider the ethical implications of abortion.	5. To identify one's own values associated with one's point of view on abortion.	VI. D.	Write a one page paper on student's position related to abortion. Class debate pro and con.

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline; Values, Ethics and Future.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
6. To explore the impact of sex hormones on human behavior.	6. To evaluate the role of sex hormones in developing masculine and feminine traits.	VI. B.	Critically evaluate the article "She/He," Konner, Science 1982. September, 1982, pp. 54-61
7. To consider the role of stress on human health.	7. To evaluate the effect of stress on human health as well as the "health" of society.	I. F.	Life Change Index to be filled out by each student who will then interpret the results. Take blood pressures in class.

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To develop one's potential as a critical, effective thinker.	1. To use the knowledge learned in the course to make wise decisions regarding one's health.	Entire course.	Exercise on decision-making from Koberg & Bagnall, Universal Traveler.
2. To use effective thinking in examing health topics chosen for individual research and analysis.	2. To apply information obtained from examining three different health topics to one's own life.	Papers one, two and three.	Individual evaluation as part of each health paper.
3. To recognize the components of the problem-solving process.	3. To evaluate the process used by the student in problem-solving.	VI. E. 4	Classroom discussion of problem-solving steps.
4. To use a problem-solving process.	4. To apply a problem-solving process to solving genetics problems.	V. E. 4	Classroom exercise.

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To assess the student's skills in reading and writing.	1. To read a selected passage from the textbook and to write a summary of the reading and answer questions about the reading.	I. A. E.	Classroom exercise: reading and writing assessment & in-class presentation follow-up regarding tutorial help.
2. To investigate a topic related to health and to write a summary of one's findings.	2. To write three papers which demonstrate the student's biological understanding and personal evaluation of the topics given.	I.-II.: 1st paper III.-IV.: 2nd " V.-VI.: 3rd "	Individual research; outline due one week before paper due.
3. To see the interrelationships of concepts studied by using the process of reading and writing.	3. To write a summary of each concept studied and to make relationships to previously studied concepts.	Entire course.	Five minute writing on concept just studied - how relate to previous concepts studied? Five minute writing on concept to be studied - e.g., what do you know about the nervous system? How does it relate to the endocrine system?
4. To refine the student's skills in reading and writing.	4. To write short papers on assigned topics.	V. E. VI. D. 5	Short papers on abortion, nuclear weapons & health.

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To develop an attitude that encourages "good" health practices.	1. To develop a plan for a healthful life.	Entire Course.	Individual evaluation. Computer programs on risk of heart attack. Also, one on how long one will live given current health practices and background.
2. To consider examples of creative endeavors in health biology.	2. To examine the work of researchers in the area of health biology.	Entire course.	Individual research for paper topics.
3. To organize information into a logical format.	3. To research three health topics and to write a paper demonstrating thorough knowledge on the topic.	I-II: Paper one II-III: " two III-IV: " three	Individual research.

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To recognize that different perspectives exist on various health topics.	1. To identify the multitude of opinions regarding the health issues discussed in class.	Entire class.	Classroom discussions on contraversial issues e.g., abortion.
2. To consider the information used to support a particular point of view.	2. To evaluate what information is used to support a particular point of view.	Entire course.	Exercise on critical review.
3. To become aware of the similarities and differences between males and females.	3. To analyze what are the similarities and differences between males and females and why might there be these similarities and differences.	VI. B.	Individual observations; individual research; reading "She and He," Konner. Classroom discussion.
4. To recognize that in any species, including Homo sapiens, that there are more similarities than differences in DNA and thus, people.	4. To recall that the similarities in DNA structure among organisms leads to their grouping as a species.	VI. E.	Classroom discussion.

OTHER:

4. Texts and Other Instructional Materials

Required Textbook:

Essentials of Life and Health, CRM, 3rd edition

Recommended Text(s):

The Human Body in Health and Disease

Other Instructional Materials:

Class handouts.

Videotapes: "The Incredible Machine"
"Human Sexuality"
"Cancer: The Modern Plague"
"Changing Patterns of Disease"
"Cardiovascular Diseases"
"How Fit is Fit Enough"

Films: "The Heart Attack, CRM
"Alcoholism: A Model of Drug Dependency"
"DNA: The Blueprint of Life"

Computer Programs: Risk
Live

Models of prenatal development

Blood pressure apparatus

Microscopes

Biofeedback equipment

5. Evaluation and Grading Plans

EVALUATION PLAN

There will be four examinations, including a final. There will also be additional A-T assignments and periodic quizzes to evaluate the student's progress in fulfilling the stated objectives. Three short papers will be required that demonstrate the student's biological understanding and personal evaluation of the topics given. The General Education criteria will be evaluated in examinations, quizzes, exercises and papers.

GRADING PLAN:

The final grade will be determined by evaluating the correctness and completeness at the stated objectives. Grades will be distributed as follows:

Weighting of tests, assignments, etc.:

3 unit exams at 100 points	300	
1 final exam	100	
3 papers at 40 points each	120	
Quizzes, assignments, A-T exercises	200	
	720	total points

100 - 90%	Mastery of tests, quizzes, papers, audiotutorial assignments, class participation will earn an A
89 - 80%	Mastery of tests, quizzes, etc., will earn a B
79 - 70%	Mastery of tests, quizzes, etc., will earn a C
69 - 60%	Mastery of tests, quizzes, etc., will earn a D

59 - below, will earn an F

6. Course Policies

An assessment of reading and writing skills will be made during the first week of class. Students deficient in these skills will be required to work with tutors. It is expected that the student will attend all class meetings. It is the responsibility of the student to inquire about the information, handouts, or assignments missed during his or her absence. There will be no make-up exams except due to documented illness or court appearance. No late papers or other assignments will be accepted. Therefore, it is the student's responsibility to take exams on scheduled days and times.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Biological Science 10LS

General Biology

Course Author(s): Jerry Davis (Paul Hansen)

For full and part-time biological science instructors.

1. CATALOG DESCRIPTION

Title of Course:	General Biology
Course Number:	10LS
Unit Value:	4 units
Mode of Instruction:	1 hour lecture/1 hour seminar/ 4 hour auto-tutorial lab

Brief Description of the Course:

An integrated study, with laboratory techniques and methods, of the biological concepts, principles, and laws pertaining to life processes. An intradisciplinary approach will be used to develop an understanding of living organisms in terms of these processes, especially the human species. The creative process of scientific inquiry, the aesthetics of science, and the implications of scientific knowledge will be emphasized. Throughout the course, critical thinking, problem solving, and effective learning will be developed.

Articulation Statement:

LMC General Education
Transfer: UC, CSUC (Gen. Ed. area B)

2. OVERVIEW and RATIONALE

Overview

This course is designed to impart fundamental biological principles that will help pave the way for greater appreciation for the elegance of biological design and function. These principles will provide ample opportunity for understanding many societal implications of this knowledge. In addition, topics as well as instructional strategies incorporate a "spirit of general education" by providing the learner with opportunity for viewing many biological processes as a scaffolding from which to build a more global way of understanding living interaction.

General Biology 10LS is a uniquely designed course that teaches essential biological principles, while simultaneously utilizing general education strategies to make the course more meaningful. The course has been divided into 22 smaller subdivisions referred to as minicourses. each minicourse is designed to develop one to several basic biological principles. The minicourses have been sequentially arranged so as to develop an heirarchy of learning, beginning with nonliving processes (atomic and molecular interaction) and progressing to the cellular, then systems then organismic and finally to the ecosystem level. This knowledge is utilized to build an ecosystem model as a final "all encompassing" topic in which the natural role of humans within their ecosystem is explored, as well as the more "unnatural role, that of a modifier of natural processes is also studied. By the end of the semester, the learner has a greater appreciation for the interrelatedness of knowledge, life, and events that affect this spaceship earth.

Concepts in this minicourses are presented to the student by utilizing an audiotutorial (A-T) method of instruction. Students spend as much time as needed listening to cassette tapes and utilizing an accompanying minicourse syllabus. If questions arise during the student's studies, they can be quickly and effectively resolved by the instructor or tutors that are always readily available. This phase of pedagogical methodology is termed the "Independent Study Session" (ISS), and generally accounts for four hours per week. The ISS allows learners to study at their own learning rates, however, time limits are established to motivate the procrastinators. As an example, students have a full week to finish an assignment. They can spend as much time as needed during that week but should complete the assignment. Quizzes are taken after the student feels he/she have mastered the subject. A 70% or higher level of achievement is required for mastery. If the student scores less than that, they are required to repeat all or parts of the lesson until "mastery" of the subject is achieved. The information learned in these minicourses functions as a foundation from which to build general education concepts.

These concepts are developed and nurtured in the second phase of the course termed the "General Education Session" (GES). This session meets one hour per week and may accomodate large numbers of students. It is during these sessions that general education concepts are molded from the more "traditional biological principles" learned in the independent study session. It is these sessions that bridges the traditional biology principles with LMC general education biology principles. It is these sessions that incorporates "the spirit of general education" into traditional biological principles.

Information learned from both the minicourses and the General Education lectures are further clarified and amplified in the third phase of learning.

The third phase of learning occurs in "Small Group Seminars" (SGS). Every student is required to attend a one hour seminar each week. These seminars consist of 6-8 students, plus instructor. During these small group seminars information learned in both the independent study sessions and the general education sessions are clarified and synthesized into larger, more meaningful concepts. Discussion of controversial issues, i.e., genetic engineering, cloning, and evolution that are raised in the general education sessions are most effectively handled during this phase of the program. Also during this time pedagogical strategies are nicely implemented. Questions are raised by the instructor that will nurture and hopefully develop critical and effective thinking about biological ideas. Reading and writing skills are nurtured by actively involving the students with both out of class and in-class assignments that demand the use if these skills. Students are asked to write about important concepts that require internalizing, analyzing and synthesizing ideas. Many of these assignments focus on general education concepts such as aesthetics of knowledge, implications of knowledge, creativity and pluralism. Discussion and critique of these works is handled nicely in these seminars.

Rationale

General Biology 10LS offered at LMC is truly a general education course. It is a discipline laden with general education principles fabricated from its intradisciplinary family. Equally significant, it incorporates pedagogy that anchors it into a general education mold. Many of the concepts taught instill a greater understanding and appreciation for living interaction and dependency. This expands one's knowledge of interconnectedness, a type of global view. This concept is highlighted with the last two minicourses in which the human's role as a producer, consumer, and modifier of the environment is examined. It is expanding scientific knowledge that is allowing us to not only modify environments but also to radically change courses in evolution. Through genetic engineering, new life forms are being created to hopefully benefit the "human kind," and a society touched by these breakthroughs should be knowledgeable in the biological sciences.

In a heterogenous society such as ours it seems imparative that this society recognize and appreciate biological and sociological diversity, but most importantly, recognize and appreciate the overwhelming similarities among people on this planet. General Biology 10LS validates these multitudes of similarities, and gives significance to our diversity. This allows for a greater appreciation for the uniqueness and commonalities among people on Earth.

Different instructional strategies are used that aid in the learning process. The "Independent Study Session" allows learners to learn concepts at their own learning rates. In addition: (1) tutors and instructors are readily available to answer questions and clarify concepts; (2) small group seminars are designed to alleviate problem areas; (3) stu-dents can repeat any part of the material; students "master" the subject.

General Biology 10LS is truly learner-centered. This course has a very positive impact on the learner's capabilities to succeed as a student.

In addition to the small group seminars helping to clarify concepts and develop thinking, seminars function as an environment to: voice learning frustrations, ask questions about learned concepts and their implications, and generally, function as an environment more conducive to personal student-instructor interaction. Reading and writing exercises can also be more personalized in these sessions.

The utilizing of cassette tapes and tutors for self-paced learning; the one-to-one interaction in seminars; and the more formal setting of the general education session which cultures listening and notetaking skills, are all contributing factors that help Biology 10LS to be a general education course.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

This course content is divided into two separate outlines, one is the minicourse outline and the second is the General Education Session (GES) outline. The minicourse outline consists of 22 separate lessons. Recall each minicourse is accompanied by a cassette tape and these lessons are learned independently in the independent study sessions. The second content outline is for lecture material to be covered in the weekly General Education Session (GES). Recall these are one-hour lectures. Usually one to several minicourse lessons establish a theme from which the general education session lecture has been developed. The outlines are organized into weekly assignments for the purpose of illustrating scheduling and the "reality" of finishing proposed content. The side by side nature of the outlines illustrate the connections between the minicourse material and the lecture material presented in the general education sessions.

WEEK #1

MINICOURSE CONTENT

The Microscope

1. Importance of the microscope
1.1 The compound microscope
1.2 The stereoscopic microscope
1.3 The use of scientific measurement

Characteristics of Life

2. Problems with defining life
2.1 Eight characteristics of life
    2.1.1. structure
    2.1.2. growth
    2.1.3. irritability
    2.1.4. reproduction
    2.1.5. heredity
    2.1.6. adaptation
    2.1.7. motility
    2.1.8. metabolism
2.2 Virus - a special consideration

GES CONTENT

1. Introduction to Course
1.1 Overview of General Biology 10LS
1.2 Structural arrangement of the course
    1.2.1. Independent Study Sessions (ISS)
    1.2.2. Small Group Seminars (SGS)
    1.2.3. General Education Sessions (GES)
        1.2.3.1. Purpose & topics to be covered
1.3 Grading
1.4 Policies

3.1 Course Content Goal, continued

WEEK #2

3. Chemical Basis of Life
- 3.1 Basic atomic structure and bonding
- 3.2 Types of compounds
  - 3.2.1. Inorganic compounds
  - 3.2.2.1. Carbohydrate structure and importance
  - 3.2.2.2. Lipid structure and importance
  - 3.2.2.3. Protein structure and importance
  - 3.2.2.4. Nucleic Acids - structures and function
- 3.3 ATP & ADP structure and importance
- 3.4 Types of chemical reaction
  - 3.4.1. Digestion reactions
  - 3.4.2. Synthesis reactions
  - 3.4.3. Transfer reaction
- 3.5 Acids and bases

*2. Perception, stereotyping
- 2.1 Senses used in perception
  - 2.1.1. Ways to deceive the senses
  - 2.1.2. Stereotyping - its usefulness, its deception
- 2.2 The scientific process defined
  - 2.2.1. Components of the scientific process
    - 2.2.1.1. gather data
    - 2.2.1.2. organize data
    - 2.2.1.3. look for patterns
    - 2.2.1.4. theorize about patterns
- 2.3 Use of the scientific process
- 2.4 Reasons for error in the scientific process
  - 2.4.1. Biases and stereotyping
- 2.5 Right and left hemispheric differences in thinking

WEEK #3

4. Physical basis of life
- 4.1 Molecular movement
  - 4.1.1. Diffusion
  - 4.1.2. Osmosis
  - 4.1.3. Active Transport
- 4.2 Types of solutions
  - 4.2.1. Suspension solution
  - 4.2.2. Colloidal solutions
- 4.3 Types of toxicity and molecular movement
  - 4.3.1. Hypertonic solutions
  - 4.3.2. Hypotonic solutions
  - 4.3.3. Isotonic solutions

*3 Life - Its requirements, its needs, its greeds
- 3.1 Definition of life
  - 3.1.1. Eight characteristics of life
- 3.2 Basic requirements for organisms
  - 3.2.1. The human, an exception to the game
    - 3.2.1.2. Basic requirements for humans
    - 3.2.1.3. But we want more
    - 3.2.1.4. Why?
    - 3.2.1.5. Differing societal expectations

3.2 Course Content Goal, continued

WEEK #4

5. Structural Basis of Life - The Cell
5.1 Relationship of cellular shape to function
5.2 Tissues
5.3 Parts of the cell
    5.3.1. Nuclear organelles
    5.3.2. Cytoplasmic organelles

*4. Structural composition to living systems
4.1 The atom, the fundamental unit of matter
4.2 Atoms make molecules
4.3 Molecules make cellular organelles
4.4 Cellular organelles interact to make a functional cell
4.5 Similar cells function to make tissues
4.6 Tissues function to make organs
4.7 Organs function to make organ systems
4.8 Organ systems function to make organism
4.9 Organisms comprise populations
4.10 Populations comprise societies
    4.10.1. Societies should be designed to benefit its constituents
4.11 Societies make up the world
    4.11.1. Societal interaction is generally designed to benefit the society
4.12 All forms of interaction from the molecular to the societal interaction is energy dependent

WEEK #5

6. Photosynthesis
6.1 Interdependence between plants and animals
6.2 Net chemical reaction for photosynthesis
    6.2.1. Requirements for photosynthesis
    6.2.2. Products of photosynthesis
6.3 Sites for photosynthesis
6.4 The light reaction
6.5 The dark reaction

*5. Midterm I

(Minicourse includes #1-5)
and
(GES 1-4)

3.1 Course Content Goal, continued

WEEK #6

7. Cell respiration
7.1 Sites of cell respiration
7.2 Requirements and products for cell respiration
7.3 Anaerobic glycolysis
    7.3.1. Anaerobic respiration in plants
    7.3.2. Anaerobic respiration in animals
7.4 Decarboxylation
7.5 Citric acid cycle
7.6 Cytochrome system

*6 Energy and living dependency
6.1 Energy defined
6.2 Two laws of thermodynamics
    6.2.1. first law of thermodynamics
    6.2.2. Second law of thermodynamics
6.3 Photosynthesis is a process to organize energy
    6.3.1. There are intracellular energy banks for saving the "acquired energy"
6.4 Cell respiration is a proces to utilize that organized energy
6.5 The energy is utilized to drive living systems
6.6 To drive larger, nonliving systems also requires energy
    6.6.1. These systems are fossil-fuel dependen
        6.6.1.1. Fossil fuel were once produced by livin organisms
6.7 The ultimate flow is the system-entropy
    6.7.1. The reasons for eati

WEEK #7

8. Treatment and transport
8.1 Phylogenic analysis for
    8.1.1. simple diffusion
    8.1.2. Gaseous exchange systems
        8.1.2.1. Guard Cells
        8.1.2.2. animals utilizing simple diffusion
        8.1.2.3. Tracheae in insects
        8.1.2.4. Gills
        8.1.2.5. Anatomy of lungs
        8.1.2.6. Gaseous exchange at the alveolus
8.2 Phylogenic analysis of digestion
    8.2.1. Intracellular digestion
    8.2.2. Development of the gastrovascular cavity
    8.2.3. The complete digestive system

*7 DNA & RNA - "The Power"
7.1 Basic molecular design (a review)
7.2 The importance of DNA
7.3 Theories behind genetic engineering
7.4 Potential benefit to genetic engineering
7.5 Potential harm with "gene tampering"
7.6 Cloning - procedural designs
    7.6.1. How far can we go?
    7.6.2. How far do we want to go?
7.7 Societal implications

3.2 Course Content Goal, continued

WEEK #7, continued

8.3 Transporting mechanisms in animals
  8.3.1. The circulatory system
8.4 Transporting mechanisms in plants
  8.4.1. Xylem tissue
  8.4.2. Phloem tissue

9. The nucleic acids - DNA & RNA
9.1 Structural composition of DNA & RNA
9.2 DNA synthesis for cell division
9.3 Protein synthesis

WEEK #8

10. Chemical control
10.1 Definition of exocrine glands
10.2 Definition of endocrine glands
10.3 Hormones - defined
10.4 Feedback control mechanisms
10.5 Various mammalian glands, hormones and function
  10.5.1. hypersecretion of hormones
  10.5.2. hyposecretion of hormones
10.6 Plant hormones and function

*8 Masculinism vs. feminism -
8.1 Male hormones
  8.1.1. Glands, hormones, and function
8.2 Female hormones
  8.2.1. Glands, hormones, and function
8.3 Masculizing/feminizing the brain
8.4 Do hormones warrant sex roles?
8.5 Societal implications

WEEK #9

11. Neural control
11.1 Functions of nerves
11.2 Phylogenetic analysis of nervous systems
11.3 Basic anatomy of neurons
11.4 Physiological function of the neuron
11.5 Parts and functions of the brain
11.6 Divisions of the nervous system

*9 Midterm II

Minicourses 6-10

GES 6-8

3.2 Course Content Goal, continued

WEEK #10

12. Homeostasis
12.1 Osmoregulation
    12.1.1. The contractile vacuole
    12.1.2. The kidney
12.2 The lymphatic system
12.3 The respiratory mechanism
12.3.1. The Herring Breur reflex
12.4 The role of guard cells in gaseous exchange
13. Communication
13.1 Purpose for communication
13.2 Types of communication
    13.2.1. Audio
    13.2.2. Visual
    13.2.3. Tactile
    13.2.4. Chemical
    13.2.5. Other possible forms of communication
13.3 Examples of communication

10. Stress and balance
10.1 Homeostasis defined
10.2 Stress defined
10.3 Cellular stress
10.4 Organismic stress
    10.4.1. Homeostatic mechanisms at work to alleviate stress
    10.4.2. Disease - an inability to cope with stress
10.5 Societal stress
    10.5.1. Causes of societal stress
    10.5.2. Homeostatic mechanisms to alleviate societal stress
    10.5.3. Societal disease - A failure in homeostasis is often due to a lack of communication
        10.5.3.1.1. Overproduction or underproduction of hormones due to a lack of tissue communication
        10.5.3.1.2. Cancer is an uncontroll growth of all th no longer recognizes boundaries.
        10.5.3.1.3. Uncontro led population growth is due in part to a failur to recognize physical boundaries.

3.2 Course Content Goal, continued

WEEK #11

14. Mitosis
14.1 Why cell division occurs
14.2 Steps involved in cell division
14.3 Differences in animal and plant cell division
15. Meiosis
15.1 Purpose of meiosis
15.2 Steps involved in meiosis
15.3 Spermatogenesis - process and location
15.4 Oogenesis - process and location
15.5 Sporogenesis - process and location

*11. Communication - Its evolution into complexity
11.1 Intracellular communication
11.2 Intercellular communication
11.3 Organismic communication - types
    11.3.1. Chemical
    11.3.2. Tactile
    11.3.3. Visual
    11.3.4. Audio
    11.3.5. Others, ESP, electrical, etc.
    11.3.6. Written communication
        11.3.6.1. The shortcomings to written communication
11.4 Expansion of brief concepts introduced in (10.5.3.1. - 10.5.3.1.3.)
11.5 Problems when societies fail to communicate

WEEK #12

16. Reproduction
16.1 Generalizations about types of reproduction
    16.2.1. Asexual reproduction
    16.3.2. Sexual reproduction
        16.3.2.1. Human reproduction
16.4 Plants and alternation of generation
16.5 Special considerations
    16.5.1. Hermaphroditism
    16.5.2. Parthenogenesis

*12 Genetic propagation - a link to the future
12.1 Mitosis is a requirement for asexual reproduction
12.2 Meiosis is a requirement for sexual reproduction
    12.2.1. Meiosis is a process that gives use to genetic variation
    12.2.2. Importance of genetic variation
    12.2.3. Contributions of variation to society

3.2 Course Content Goal, continued

WEEK #13

17. Genetics
17.1 Mendel and his experiments
17.2 Meiotic review
17.3 Introduction to the punnet square
17.4 The monohybrid cross
17.5 The dihybrid cross
17.6 Incomplete dominance
17.7 Sex-linked traits

Midterm III

Minicourses (11-16)

GES 10-12

WEEK #14

18. Development
18.1 Embryonic development of several invertebrates
18.2 Mammalian development
18.3 Plant development

14. The creative discovery to genetics and its implications diversity
14.1. Mendel's creative discovery
  14.1.2. Mendel's experimental design
14.2 Genetics - an explanation to diversity
  14.2.1. Importance to understanding the meotic process
  14.2.2 Genetic crosses will be used to validate variations within a species.

WEEK #15

19. Adaptation
19.1 Definition of adaptation
19.2 Types of adaptation
  19.2.1. Morphological
  19.2.2. Physiological
  19.2.3. Behavioral
19.3 Explanation as to how adaptations occur
19.4 Adaptation as a mechanism for evolution

15. Life Cycles
15.1 Various life cycles will be illustrated
  15.1.1. Life cycle of a flowering plant
  15.1.2. Life cycle of a single-celled organism
  15.1.3. Trace the embryonic development of the human from conception to term
    15.1.3.1. Cite many of the marvelous events that must occur during development
  15.1.4. Survey the human life cycle
15.2 Growth and development of a society

3.2 Course Content Goal, continued

WEEK #15, continued

- 20. Evolution
- 20.1 History of evolution as a science
- 20.2 Early thinkers of evolution
- 20.3 Lamarck, Darwin, and others
- 20.4 Evidences of evolution
- 20.5 Types of evolution
  - 20.5.1. Divergent
  - 20.5.2. Convergent
  - 20.5.3. Parallel

WEEK #16

- 21. Ecology
- 21.1 Ecosystem defined
- 21.2 Components of an ecosystem
  - 21.2.1. Laws of thermodynamics
  - 21.2.2. Significance of thermodynamics
  - 21.2.3. Abiotic components
  - 21.2.4. Biotic components
    - 21.2.4.1. Producers
    - 21.2.4.2. Consumers
    - 21.2.4.3. Decomposers
- 21.3. ______________________

- 16. Theories on the origin and
- 16.1 Abrogenesis
- 16.2 Biogenesis
- 16.3 The evolutionary process
  - 16.3.1. Examples of various life forms
    - 16.3.1.1. Examples of elegant designs and function
      - 16.3.1.1.1. Illustrations of adaptations
- 16.4 Comments on the aesthetic qualities of life
- 16.5 Evolutionist vs. creationist

WEEK #17

- 22. Environmental problems
- 22.1 Increase in human population
- 22.2 Air pollution
- 22.3 Water pollution
- 22.4 Land pollution
- 22.5 There is hope for the future

- 17. The earth - a finite habitat with "growing" problems
- 17.1 Rates of population growth for various countries
- 17.2 Problems associated with population growth
  - 17.2.1. Limited resources and consequently a finite carrying capacity
  - 17.2.2. The role of the scientist for future survival

WEEK #18

REVIEW FOR FINAL

FINAL
Minicourses 17-22
GES 14-16

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
To illustrate that General Biology 10LS is the common denominatory to the following major intradisciplinary topics: 1. Explain the basic life needs of living organisms	1. To list requirements necessary for organisms to survive. 1.1 Discuss why humans have more basic life needs than a "simple" organism.	Minicourse, #2,3, 6,7,8,10,12,13, 15,16,17,21,22 GES lecture 3,4, 6,10,11,15,17	Lecture/discussion will supplement minicourse material and GES lecture Slides for GES lecture #4 and #17
2. Show various biological structure and function relationships.	2. Give examples of various biological structure and function relationships 2.1 Describe the importance of structural design to function. 2.2 Give examples as to how society is designed to benefit its constituents.	Minicourse, 5,6, 7,8,9,10,11,12, 14,15,16,17,19, 20,21 GES lecture #4	Structure and function relationships is a theme that permeates throughout lecture/discussion.
3. Explain the various energy relationships that must exist if life, as we know it, is to continue.	3. Define energy 3.1 Explain the relationship between the sun's energy and the energized hydrogen found in food. 3.2 Explain how the sun's energy is transferred to other living organisms, both plant and animal 3.3 Explain why any living system is energy dependent. 3.4 Explain why poor countries in the world must eat less animal protein.	Minicourse 6 & 7 GES 6	Minicourse assignment 6 & 7, and GES lecture #6 Students will be asked to write on objective 3.1-3.4 - one of those objectives will show up on an essay exam, so students are asked to prepare ahead of time.

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
4. Explain that stress and balance (homeostasis) are fundamental, universal laws of order that influence both living organisms and societies. 4.1 Explain that stress and balance is illustrated by entropy.	4. To define stress and homeostasis 4.1 Give examples of various organismic homeostatic mechanisms. 4.2 Give examples of various types of homeostatic failures within organism. 4.3 Know the role of the endocrine and nervous system for maintaining homeostasis. 4.4 Illustrate various types of societal stress. 4.5 Illustrate various types of homeostatic mechanism employed by society 4.6 Discuss the relationships between stress, balance, and entropy.	Minicourse 10,11, and 12. GES lecture 10	Minicourses 10,11, & 12 paves the foundation for a formal lecture to be given in GES. 35 mm slides. Take home writing assignments based on objective 4 - 4.5

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
5. Explain the significance to understanding the hereditary material.			
5.1 Describe and explain the structure of the gene	5.1 To describe components to a nucleotide	Minicourse #9	Minicourse #9, seminar Film DNA: Thread of Life
5.2 Explain the process of protein synthesis	5.2 Discuss the process of protein synthesis	Minicourse #9	" "
5.3 Explain the process of mitosis.	5.3 Analyze the steps to mitosis	Minicourse #14	" #14, " Film - Mitosis
5.4 Explain the process of meiosis	5.4 Analyze the steps to meiosis	Minicourse #15	Minicourse #15, seminar
5.5 Explain why DNA is the link to future generations.	5.5 Discuss how DNA is the link to future generations.	Minicourse #9, 14, 15, 16 - GES #14	GES Lecture #14 Film - Mitosis
5.6 Explain how to determine phenotypic ratios from specific genetic crosses.	5.6 Do genetic problems.	Minicourse #17	Minicourse #17, seminar
5.7 Explain how to create new life forms by genetic manipulative processes.	5.7 Analyze one's feelings and determine their position on genetic manipulations	GES #7	Lecture GES #7, seminars. Film: Mystery of Life

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
6. Explain and describe various supporting arguments to theories on evolution.	6. Compare and contrast theories on evolution with the creationists' view.	Minicourse #19, 20 GES #16	Minicourses #19, 20 and GES lecture #16 Seminars.
6.1 Explain the creationist's view to the origin of life.	6.2 Discuss the roles of mutations and adaptations as mechanisms for evolution.		
6.2 Explain the role of mutations and natural selection to the process of evolution.			
7. Explain how life is a cycle that involves reproduction, growth, development, degeneration, and disintegration	7. Assess one's stage of the life cycle.	Minicourse #18	Minicourse #18. Filmloops on Development. 35 mm slides on development. Video: Miracle Months, & Incredible Machine.
7.1 Illustrate how the pattern of growth for a species is predictable.	7.1 Compare and contrst plant and animal development.		
7.2 Show how human growth and development includes physical, social, mental and spiritual aspects, all of which are interrelated.	7.2 Discuss factors that contribute to one's physical and mental well-being.	GES Lecture #15	GES Lecture #15

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. Explore the role of the scientific process in developing knowledge.	1. Give examples and illustrations of knowledge acquired through the scientific process. To recognize the scientific process as a problem-solving tool.	*GES - 2 The following minicourses utilize experiments that help emphasize the experimental design - prt of the scientific method:	Lecture on perception and the scientific process.
2. Describe and explain the various stages of activity inherent in the process of scientific inquiry.	2. List the stages of the scientific process.		
a. gather data (observation) b. organize c. pattern formation d. model construction	a. Describe how prejudesis and biases influence observations. d. To understand limits to scientific observation & problem-solving.	2 3 4 6 7 8	Seminars - Have students utilize scientific proces to solve certain "given" problems. Discuss their approach in resolving the problem.
3. Encourage students to analyze problems from a scientific strategy.	3. From given data, make inferences and logical conclusion. 3. Given an unresolved problem, design an experiment that would test potential solutions for resolving the problem.	10 11 12 14 15 16 17	

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To show that acquiring knowledge about the wonders of living processes and systems leads to a greater appreciation of life.	1. To gain fundamental knowledge of known principles. 1. To know that biological processes function as common denominators relating various forms of life.	Appreciating biological design and function is an underlying theme that permeates throughout the course. It is especially emphasized in GES #15, 16.	I will suggest the beauty of biological design in lectures and seminars. Selected media such as slides and movies are available to illustrate the beauty of design, i.e., "The Incredible Machine" - a video about the beauty of the human body.
2. To show there is beauty in biological design and function.	2. To know that biological systems are organized, and function eloquently in their design. 2. To cite examples of elegant biological design and function. 2. To increase one's appreciation and sense of beauty for this design.		
3. To state that a natural consequence of learning is to expand one's awareness of ignornce.	3. To know that gaining knowledge gives one a foundation from which to build a comprehension of ignorance.		

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
Explore the influence of biological discoveries in our daily lives, i.e., medicine and food production.	1. Realize the importance of biological discoveries in our daily lives.	GES 2, 7, 8, & 17	Lecture - Specific lectures will incorporate information that "highlights" implications of knowledge Seminars - Discussion of GES lecture material will reinforce how scientific knowledge shapes our lives
Examine the influence of biology as a mechanism for shaping our future.	2. Understand the significance of the need for scientific discoveries.		
Examine the ethics of tampering with natural processes, i.e., genetic engineering, cloning.	3. Examine one's own ethics and values as they relate to controversial topics as "gene tampering," abortions, etc.		

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Require students to read and write an intrepretation of specific articles.	1. Analyze reading material.		Students will be asked to read the following "He/She" "Duality of The Brain" "The Aging Process" TEXT Minicourses
2. Encourage students to do extra credit work that requires reading and summarizing scientific journals.	2. To read and write summaries of scientific articles.		Scientific American articles are listed at the end of each minicours Students are encouraged to read these articles for extra credit.
3. Show students how writing can be used as a tool for synthesizing ideas into broader, more meaningful concepts.	3. To write as a way of learning material.		
3. To show the inherent flows in writing as a communicating mechanism.	3. To understand that writing does not have the built-in clarification advantages that verbal language does.		Prepared H.O. for GES II

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
	3. To write in expository fashion.	Information presented in the GES, (i.e., #11) will provide opportunities to develop reading and writing skills.	Reading and writing assessment with follow up for tutorial assistance. Exams will incorporate essay questions based on lecture and reading material.
4. Encourage the students to take notes in the formal lecture (GES) and seminars.	4. Learn and practice skills of notetaking.		Many AT units require students to look up reference materials and read appropriate information.
5. Assess student reading and writing abilities.	5. To read a selected passage from the course textual materials and to write a summary of the reading.	Week 2 GES	Classroom exercise.

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
Encourage students to use independent thinking for making connections between different learned concepts. Encourage students to think of needed research areas in the biological sciences.	1. Understand deductive and inductive thinking. 2. Make inferences from raw data. 3. Synthesize small concepts into larger, more global connections. 4. Conceptualize through imagery, many of the invisible processes. 5. Analyze data and learn to separate the unimportant from the important.	Relating concepts learned in mini-courses to broader, more expanding concepts pre-presented in the GES. *GES Minicourse 1-17 1-22	Lecture and seminars will encourage critical and effective thinking. Laboratory experiments are presented that requires critical thinking in order for students to make appropriate conclusions.

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To recognize everyone has creative potential.	1. Cite several examples of how creativity has been used in scientific discoveries.	*GES 2, 7, 12	Lecture
2. Understand creativity is necessary for new experimental designs.	2. Know lack of creativity leads to stagnation in scientific discoveries.		Lab exp. Seminars - ask students to design exp. to find unknown.
3. Understand the connections between perception and creativity.	3. Know each individual is creatively different.	Minicourse utilizing labs to illustrate concepts.	

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that Have an Impact on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. Show similarities and differences among living organisms.	1. Note basic biological similarities and differences between males and female humans. 1. Define species, race and ethnicity.	Minicourse #9, 18, 19, 21, 22 GES 3, 4, 7, 8, 10, 14, 15	Formal GES lectures Seminar discussions about general education session (GES) presentation.
2. Show a need for cooperation for resolving some of the world's ecological problems.	2. Consider the importance of scientific discoveries to help underdeveloped countries. 2. Appreciate the idea there is one world, with many diverse organisms interacting, with the best form of interaction directed towards a harmonious balance.	GES #17	

OTHER:

4. Texts and Other Instructional Materials

Required Textbook: Packet of 22 minicourses (Hansen/Davis)
Biology: The Science of Life (Greulach/Chiappetta)

5. Evaluation and Grading Plans

EVALUATION PLAN

The course is divided into 22 minicourses, plus General Education lectures given in the GES. Each minicourse is accompanied with three different sets of quizzes. After a student thinks they have mastered a minicourse they should take a quiz on the material. Tests are instantly graded and missed questions are discussed with available tutor. If the student doesn't pass the quiz with a 70% or higher, the student must retest after repeating parts of the lesson, or preferably after discussion of the unit in a seminar. Only the highest of any three "sets" of quizzes will count for the grade.

Three midterms and a final are given during the semester. These midterms include General Education lectures plus minicourse assignments. The General Education portion of the exam will consist of essay questions, that will test comprehension of the major general education concepts.

Extra credit is available to students that summarize in writing, articles from scientific journals, or TV specials dealing with scientific topics.

GRADING PLAN:

3 midterms at 60 points (20 points each)

1 final at 20 points

Quizzes at 20 points

Reading and Writing assignments at 5 points

Extra Credit: One point will be added to lowest midterm score for each science article summarized.

After total points will be translated into a percentage and the grades will be given accordingly:

90 - 100% = A

80 - 89% = B

70 - 79% = C

60 - 69% = D

59 - less = F

6. Course Policies

1. The student is expected to attend all lectures and seminars.

2. It will be the responsibility of the student to inquire about missed information, handouts, and assignments.

3. Missed exams are only allowed only if an emergency prevented an individual from taking the exam. It is the student's responsibility to notify their instructor immediately so a make-up can be scheduled.

4. It is the student's responsibility to drop the class should this become necessary.

COURSE OUTLINE
TIER I GENERAL EDUCATION COURSE

Course Title: Biological Science 20LS

Principles of Biology

Course Author(s): Jerry Davis & Paul Hansen

For full and part-time biological science instructors.

1. CATALOG DESCRIPTION

Title of course:	Principles of Biology
Course number:	Bio. Sci. 20LS
Unit Value:	5 units
Mode of instruction:	3 hour lecture & 6 hours lab/week.

Brief Description of the Course:

An integrated study with laboratory methods and techniques of the fundamental concepts, principles, and laws underlying life proceses on the molecular and cellular levels. An intradisciplnary approach will be used to treat cytology, biochemical cycles, genetics, reproduction, and embryonic development. The creative process of scientific inquiry, the aesthetics of science, and the implications of scientific knowledge will be emphasized. Skills in critical thinking, problem solving, and effective learning will be developed throughout the course. This is the first semester of a year course in principles of biology.

Articulation Statement:

LMC Gen Ed.
Transfer: UC, CSUC (Gen. Ed. area B)

2. OVERVIEW and RATIONALE

OVERVIEW:

This course represents an integrated approach to an understanding of biological phenomena, particularly at the cellular level.

The course begins with a brief introduction to this field of study in which the history of biology and the ever-increasing scientific achievements are appropriately portrayed. The chemical basis of life and the organization of living matter are next developed. Concepts and principles underlying bioenergetics, cyclic processes and genetics follow. The molecular basis of heredity is highlighted in terms of the current theories involving nucleic acids, DNA & RNA. Finally, the concepts for reproduction and embryonic development are treated. These topics function as starting points, from which general education concepts are built.

The course consists of three lecture hours and two, three-hour labs each week. Lectures focus on fundamental principles and discusses the relevancy of understanding this knowledge to society. Laboratory experiments are generally investigative in nature and are designed to reinforce specific principles introduced in lecture. In addition the laboratory phase of this course allows instructional methodologies not "typically" available to the lecture course. Exercises designed to enhance critical thinking, creativity, use of the scientific method and research methods are all part of the laboratory experience.

Linking the majority of the concepts in this course is a theme of elegant designs and functions. Lectures generally incorporate this theme to give students an aesthetic appreciation for living organisms and systems. Laboratory exercises further reinforce this theme, for it is in the lab that students witness elegant biological design and relate it to function. In addition, labs can nurture other types of learning not "traditionally" fostered in lecture types of courses. The scientific process (mode of inquiry) is taught early in the course and it is in the lab that students get on-hands experiences to implement the process. these labs are designed to provide investigative opportunities that help nurture and develop critical thinking. This is accomplished by having students: do appropriate experimentation, research reference texts and journals, and present this information in a formal lab write-up.

These writing assignments help students to: develop laboratory skills, write down what they know, stimulate new thought by helping students look for cause and effect relationships. Students are also required to design their own research project. Additional reading, writing, and library research are all necessary requirements for this project. Creativity is encouraged in the design of these experiments. Also many of the investigative labs encourage creativity by having students develop their own problem-solving strategies to discover cause and effect relationships.

Rationale

This biology course involves an in-depth study of basic biological principles relevant to the college-educated individual. These principles establish a foundation from which major students can radiate out into the various intradisciplines of biology. These principles are equally valid to the nonmajor student wishing to be better informed about the relevancy of biology to the individual, as well as to society.

It has been stated by many noteworthy scientists and "futurist" that we are rapidly entering the "age of DNA". This approaching era is likened by many to be as significant as the "age of electronics" or the "space age". Many feel that if humanity is to survive and prosper on this planet, it will be because of scientific knowledge acquired about DNA and the living cell. This course focuses on DNA and the cellular function and discusses the importance of this knowledge to humanity. Other topics such as aging, growth, development, cancer, and disease further adds to the relevancy of this course to the individual. In addition, the study of basic life needs, life cycles, heredity, and the evolution of biological structures and their function, homeostasis and energy relationships are all intradisciplinary elements studied in this course; this further adds to the relevancy of the course to the individual. Many of these topics begin with a historical perspective and progresses to current theoretical models. Contributions made by minority individuals is mentioned where appropriate. Also, many of the topics covered during the semester substantiates biochemical similarities among living organisms. This knowledge acts as binding threads linking all life forms, from the miniscule, single-celled organism to complex forms such as the human species. This knowledge should give one an additional "earthy" feel for pluralism.

This course is designed to meet the needs of students who seek an in-depth study of basic biological principles. The course will satisfy requirements for upper division work in biology, pre-medical, pre-dental, veterinary medicine, forestry, wildlife management, and other related fields.

3.1 Course Content Goal

- 1. From the inception of biology to the 21st Century
- 1.1 Biological Beginnings
  - 1.1.1 Biol. B.C.
  - 1.1.2 Pre and Post Renaissance Biology
  - 1.1.3 1900s
    - 1.1.3.1 Genetics
    - 1.1.3.2 E/M
    - 1.1.3.3 Molecular Biol.
- 1.2 Biology in the 21st Century
  - 1.2.1 Promises of Biological Technology
- 1.3 Reasons for Scientific Advancement
  - 1.3.1 World-wide Contributions from the Scientific Community
    - 1.3.1.1 Ways Information is Assimilated
- 1.4 Mode of Inquiry
  - 1.4.1 Steps to the Scientific Process

- 2.2 Chemical Basis of Life
  - 2.2.1 States of Matter
  - 2.2.2 Atomic Structure
  - 2.2.3 Elements, Compounds, Molecules
  - 2.2.4 Dispersion Systems

- 2.3 Bonding & Energy
  - 2.3.1 Types
  - 2.3.2 Importance

- 2.4 Acids, Bases, and PH

- 2.5 Biologically Important Compounds
  - 2.5.1 Carbohydrates
  - 2.5.2 Lipids
  - 2.5.3 Proteins
  - 2.5.4 Nucleic Acids
    - 2.5.4.1 Nucleotides

- 2.6 Ensymes
  - 2.6.1 Structure
  - 2.6.2 Specificity

- 3. Organization of Matter--From Cells to Society
- 3.1 Membrane
  - 3.1.1 Evolving theories on Structure
  - 3.1.1 Current Theoretical Model
  - 3.1.2 Transport Mechanisms

- 3.2 Subcellular Organelles
  - 3.2.1 Membranous & Non-Membranous Organelles
  - 3.2.2 Cytoplasmic and Nuclear Structures

- 3.3 Plant and Animal Differences

- 3.4 Extracellular Structures

3.5 Cytological Techniques Used to Increase Our Perceptions of Cell Structures
    3.5.1 Microscope with Special Staining Techniques
    3.5.2 Autoradiography
    3.5.3 Cellular Fractionation
    3.5.4 Tissues
        3.5.4.1 Plant
        3.5.4.2 Animal

3.6 Organs
    3.6.1 Plant
    3.6.2 Animal

3.7 Organ Systems

3.8 Organisms

3.9 Populations

3.10 Societies

3.11 Analogy Between Organization within Societies & Organismic Organization
    3.11.1 Review of Cellular Organization
    3.11.2 An Overview of Societal Organization

4. Energy Input
4.1 The Sun's Electromagnetic Spectrum
4.2 Photosyntheses - A living Process to Organize Energy
    4.2.1 Importance in Bioenergetics
    4.2.2 Site
        4.2.2.1 Structure of Chloroplast
    4.2.3 Cyclic vs. Noncyclic Photosynthesis
        4.2.3.1 Light and Dark Reaction

4.3 Potential for Developing an Artificial Leaf
    4.3.1 Significance to Society

5. Energy Output
5.1 Cellular Respiration
    5.1.1 Glycolysis (fermentation)
    5.1.2 Kreb's Cycle
    5.1.3 Electron Transfer System
    5.1.4 Important Processes
        5.1.4.1 Dehydrogenation
        5.1.4.2 Decarboxylation
        5.1.4.3 Getting Ready Reactions
    5.1.5 Outcome
        5.1.5.1 ATP'S, CO_2, and H_2O
    5.1.6 Glycolysis of Glucose
        5.1.6.1 Steps Involved
        5.1.6.2 Aerobic vs. Anaerobic
        5.1.6.3 Net Yield of 2 ATP'S

- 5.1.7 Kreb's Cycle
  - 5.1.7.1 Importance of Acetyl Coenzyme A
  - 5.1.7.2 Outcomes
    - 5.1.7.2.1 CO_2, H^x, GTP
- 5.1.8 ETS
  - 5.1.8.1 Main Source of ATP'S (34)
  - 5.1.8.2 End Product is H_2O
  - 5.1.8.3 Variety of Carriers

- 5.1.9 Respiration of Other Nutrients
  - 5.1.9.1 Fatty Acids and Glycerol
  - 5.1.9.2 Amino Acids

5.2 Entropy and the Need for Energy
- 5.2.1 Cellular Needs
- 5.2.2 Societal Needs

6. All Cycles

6.1 Entropy in Biological Systems

6.2 The Need for Growth, Replacement, Repair, and Reproduction (asexual)
- 6.2.1 Cell Division
  - 6.2.1.1 Events
    - 6.2.1.1.1 Interphase
    - 6.2.1.1.2 Prophase
    - 6.2.1.1.3 Metaphase
    - 6.2.1.1.4 Anaphase
    - 6.2.1.1.5 Telophase

7. Understanding How Meiosis Helps Give Rise to Diversity

7.1 Purpose
- 7.1.1 Reduction Division

7.2 General Pattern
- 7.2.1 One Chromosomal Replication
- 7.2.2 Two Separate Divisions
  - 7.2.2.1 Meiosis I & Meiosis II

7.3 Gametogeneis

7.4 Sporogenesis

8. Genetics - A Way to Understand Diversity

8.1 Historical Perspectives
- 8.1.1 Mendel
  - 8.1.1.1 Law of "Segration" and "Independent Assortment"

8.2 Genetic Vocabulary

8.3 Monohybrid and Dehybrid Crosses

8.4 Sex Determination
- 8.4.1 Sex-Linked Traits

8.5 Natural Genetic Changes
- 8.5.1 Sexual Abhorations

8.6 Mutagenic Agents
- 8.6.1 Types
- 8.7.1 Technique
- 8.7.2 Current Products
- 8.7.3 Potential Products
- 8.7.4 Potential Problems
- 8.7.5 Social Issues

- 9. Molecular Basis of Heredity
- 9.1 DNA - Historical Perspective
  - 9.1.1 Pre-1900
  - 9.1.2 Post-1900
- 9.2 The Use of Creativity, To Break the Genetic Code
- 9.3 DNA Structure
- 9.4 DNA Replication
- 9.5 Genetic Code
  - 9.51 Importance of Base Sequences
  - 9.52 Triplet Coding
- 9.6 RNA
  - 9.6.1 Differences with DNA
  - 9.6.2 Types
  - 9.6.3 Protein Synthesis
- 9.7 Operator Theory

- 10. Reproductive Cycles
- 10.1 Reasons
  - 10.1.1 Natural Selective Forces that Reduce Population
- 10.2 Types
  - 10.2.1 Asexual vs. Sexual
- 10.3 Plant Life Cycles
  - 10.3.2 Alternation of Generations
  - 10.3.2 Representative Cycles of Various Phyla
- 10.4 Animal Reproduction
  - 10.4.1 Types
  - 10.4.2 Fertilization
  - 10.4.3 Types of Eggs
  - 10.4.4 Parthenogenesis
  - 10.4.5 Human Reproduction
  - 10.4.6 Reproductive Behavior
    - 10.4.6.1 Sex Roles in the Human Species
- 10.5 The Human Life Cycle

- 11. Developmental Studies
- 11.1 Development of Societies
  - 11.1.1 Population Growth
  - 11.1.2. Growth of Society
  - 11.1.3 Need for Homeostatic Mechanisms to Maintain Society
- 11.2 Biological Growth and Development
  - 11.2.1 Types
  - 11.2.2 Cleavage, Differentiation, and Morphogenesis
  - 11.2.3 Animal Embryology
    - 11.2.3.1 Stages
    - 11.2.3.2 Germ Layers (Cetoderm, Enoderm, and Mesoderm)
    - 11.2.3.3 Representatives from Various Phyla
  - 11.2.4 Plant Development
    - 11.2.4.1 Stages
    - 11.2.4.2 Seed, Fruit
- 11.3 Developmental Studies that Support Evolution
  - 11.3.1 Examples

- 12. The Aesthetics of Biology
- 12.1 Definition of Aesthetics
- 12.2 Symmetry & Beauty of Biological Design
  - 12.2.1 Functional Aspects of Design
- 12.3 Review of Semester Illustrating Interlocking Concepts
  - 12.3.1 Implication of Scientific Knowledge

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the intradisciplinary elements of the intradisciplinary family of courses.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends to do).	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline).	Procedures/Materials
Concept: Evolution			
1. To show how Evolution arises from mutation and genetic recombination.	1. Student will explain what is meant by mutation and genetic recombination.	8. 8.1.1.1 8.2, 8.5 8.5.1	Lecture, assigned reading and overhead transparencies
2. To illustrate how natural selection influences the diversity of organisms.	2. Define natural selection and discuss how the process influences the diversity of organisms.		
3. To explain how non-random reproduction may result in changes of gene frequency.	3. Student will explain what is meant by non-random reproduction and its affect on gene frequency. Discuss how gene frequency is modified by non-random reproduction	10, 10.1 10.1.1, 11.3, 11.3.1	

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the intradisciplinary elements of the intradisciplinary family of courses.

SUB-GOALS (What the course intends to do).	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline).	INSTRUCTIONAL Procedures/Materials
Concept: heredity			
1. To familiarize the learner with Mendel's historical works.	1. Student will be able to briefly summarize Mendel's work.	8., 8.1,	Lecture, assigned reading, transparencies, three videotapes (Generation Upon Generation, Genetic Engineering, and Race For the Double Helix). Three labs (Human Genetics, Drosophila Genetics, and Biochemical Genetics), and one 16mm film: (DNA: Blueprint of Life).
2. To show how organisms owe much of their structure and function to inherited traits.	2. Students will be able to describe and explain the relationship between DNA and structures of organisms.	9.3, 9.6.3	
3. Explain basic Mendelian and non-Mendelian principles of inheritance.	2.1 Students will be able to explain the relationship between biological structure and function.		
4. Illustrate how DNA is the determiner of inherited traits.	3. Student will be able to work out both a monohybrid and dihybrid cross.	8.2, 8.3, 8.4 8.4.1	
5. Explain the relationship mutation and protein synthesis.	3.1 Student will be able to solve problems dealing with sex-linkage.		
	4. Student will see relationhips between a gene and the base sequence on a DNA molecule.	9., 9.3, 9.4 9.5, 9.5.1,	
	5. Student will understand relationships between mutation and effect on protein synthesis.		

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the intradisciplinary elements of the intradisciplinary family of courses.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends to do).	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline).	Procedures/Materials
Concept: Structure/ Function Relationships	1. Student will be able to relate the importance of all membranes to the total functioning of the cell.	3., 3.1, 3.1. 3.1.1.2	Lectures, assigned reading, transparencies, 35mm slides, and 4 labs (Cell Structure, Cell Activity, Animal Tissues, and Plant Tissues).
1. To show there is a fundamental relationship between the structure of an organism and its functions; structure dictates function.	2. Student will be able to explain how membrane transport occurs.	3.1.2, A.2	
	3. Student will be able to recognize all sub-cellular	3.2, 3.2.1, 3.2.2, B.1, 2	
	4. Student will be able to explain differences in structure and function between plant and animal cells.	3.3, C.	

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the intradisciplinary elements of the intradisciplinary family of courses.

SUB-GOALS (What the course intends to do).	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline).	INSTRUCTIONAL Procedures/Materials
Concept: Energy Relationships 1. Illustrate how and why basic biological relationships are based upon the first and second laws of thermodynamics. 2. To show how and why any system is energy-dependent.	1. Student will be able to define and explain first and second law of thermodynamics.	2., 2.1.1, 2.1.2, 2.1.3	Lecture, assigned reading, transparencies, a videotape (World Within A World), and 5 labs (Physical and Chemical Basis of Life, Enzymes, Enzymes, Photosynthesis, Cell Respiration, and Cellular Metabolism).
	2. Student will be able to explain how the ATP - ADP cycle relates to energy and cell function.	5.1.5.1	
	3. Student will be able to give general explanation for light and dark reaction in photosynthesis.	5., 5.2	
	4. Student will be able to give a brief overview of cellular respiration.	5.2, 5.2.1, 5.2.2	
	5. Students will be able to explain how living and nonliving systems are influenced by energy.		

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the intradisciplinary elements of the intradisciplinary family of courses.

SUB-GOALS (What the course intends to do).	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline).	INSTRUCTIONAL Procedures/Materials
Life Cycles			
1. Illustrate how all organisms begin: life grow, and mature, then decline and die.	1. Recognize and describe how organisms begin life, mature and die.	10., 10.1, 10.3, 10.5	Lectures, assigned reading, transparencies, 35mm slides, videotape (Miracle Months), and 3 labs Reproduction, and Development).
2. Explain how each organism demonstrates its own rate of growth and developement.	1.a Outline essentials of sexual reproduction in both plant and animals.	10.3, 10.4	
	1.b Explain alternations of generations	10.3.1	
3. Familiarize the learner with the events that must occur in a timely fashion in order for there to be proper embryonic development.	1.c Evaluate one's own stage of the life cycle.	10.5	
	2. Cite examples of growth and development rates for several species of organisms.	11.2, 11.2.4	
	3. Illustrate relationships between fertilization and implantations in humans.	10.4.5	
	3.a Relate three embryonic germ layers to future events in animal development.	11.2.3.2	
Life Cycles	3.b Explain stages of plant development.	11.2.4.1	

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To teach the mode (s) of inquiry indigeneous to the discipline

SUB-GOALS (What the course intends to do).	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline).	INSTRUCTIONAL Procedures/Materials
1. Explain how the scientific method has helped advance technology.	1. Discuss how the scientific method influences technological advances.	1.3	Lecture introduces the student to the scientific method.
2. Familarize the learner with the mode of inquiry used by biologist.	List the steps to the scientific process.	1.4 1.4.1	Labs require the use of the scientific method.
	Students will apply the scientific method to lab investigations.		A semester biology project is required of all students. It must include experimentation, collection of data, and interruptation of results.
	Students will be able to recognize and apply a control in an experimental research project.		

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends to do).	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline).	INSTRUCTIONAL Procedures/Materials
Illustrate the multitude work that precedes scientific discovery.	Cite several examples of 3.1.1 scientific discoveries and trace the events that led to these discoveries.	3.5 3.1.1.2 3.5.1 3.5.2 3.5.3 8.1 8.1.1 9.2 8.7 9.7 8.7.1 11.3	Lecture videotape - Discovery of DNA 35mm slides illustrating all structures
Show there is beauty in design and function of biological systems.	Give examples of biological designs that are aesthetically beautiful.	12	35mm slides illustrating beauty and symetry of design.
Encourage students to appreciate the complexities of any life form.	Discuss why a simple, living cell should be considered extremely complex.	3 - 3.4	Labs on cell Lab on aesthetic qualities of nature.
Make students aware of fundamental laws of nature that binds all things.	Explain why any biological system is energy dependent.	2.1 2.1.3.1	Campus field trip designed to have students look for aesthetic qualities in nature.

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends to do).	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline).	Procedures/Materials
Explore the potential benefits of biological research to society.	Describe biological research that has potential benefits for resolving world strife caused by: hunger, disease and dwindling resources.	1.2.1 8.7 8.7.1 8.7.2	Lecture Discussion
	Explain the implications of DNA structure to genetic engineering. Recognize social implications of genetic engineering.	8.7 8.7.2 8.7.4 8.7.5	Video - "Mystery of Life"
Relate scientific knowledge to medical advances.	Give examples of how medical advances are closely linked to knowledge of DNA and cellular function.	12.3.1	Labs on cell and genetics.
	Students will be able to work various kinds of genetic problems and develop an awareness of their importance in genetic counseling.	8.3 8.4 8.4.1 8.5	

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends to do).	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline).	INSTRUCTIONAL Procedures/Materials
Assess reading and writing skills and make referrals to tutors.	Students needing help will participate in skill development as required.		Reading assessment. Writing assessment.
Encourage students to improve their reading and writing skills.	Students will write lab reports in correct form.		Complete frequent in-class writing assignments. All lab reports are to be written in formal fashion.
	Students will do outside reading and research for the purpose of drawing correct conclusions about laboratory experiments.		Lab reports must include library research.
	Develop skills in using writing as a learning tool. Show students how writing can help one learn concepts.		Semester research project must be completed in formal style.
	Students will conplete a semester research project that reflects personal interest in some area of biology. The project must include library research and must be formalized in written form.		In-class reading and writing workshops will be conducted.

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS (What the course intends to do).	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline).	INSTRUCTIONAL Procedures/Materials
Encourage and promote critical thinking.	Critically evaluate experimental data from all lab experiments.		All lab reports must include a critical evaluation of the experimental design and final results.
Encourage learners to analyze their own thinking patterns.	Assess one's own thinking patterns. Discuss current theories as to how one thinks.		Lecture on the scientific method. Most labs are designed to promote critical and effective thinking. This is the single, most important goal of the labs.
Describe current theories on how individuals develop thoughts.	Develop the capacity to be objective while doing experimentation.		
	Learn to apply the scientific method.	1.4	Semester project must be original research - continual critical evaluation of the experimental designed is assured by both instructor and student.

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS (What the course intends to do).	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline).	INSTRUCTIONAL Procedures/Materials
Introduce examples of creativity in biological discoveries.	Cite examples of creativity in past biological discoveries.	1.4.1 9.2	Lecture/Discussion
Illustrate the need for creativity in research.	Formulate creative lab designs for researching unknowns.	Lab	Many of the labs are designed to be open-ended for the purpose of encouraging creativity. Students are given tools and asked to solve a specific problem.
Encourage the learner to be creative in research design.	Develop one's own original research plan.	Lab	Students must do an original research project. Creativity is one of the most important elements to the project.

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, experiences and Persuasions that have an Impact on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends to do).	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline).	Procedures/Materials
Wherever possible, an attempt will be made to show the background (gender, ethnic, etc.) of the many people who have made a contribution to our present understanding of the science of biology.	1. The student should have developed an appreciation for the historical perspectives of biology, and the contributions made by all of our biological forerunners.	1.1 1.1.2 1.3 1.3.1 3.1.1 8.1 9.1	Lecture, videotapes, assigned reading, and films.
Appreciate the commonalities that exist between all life forms.	2. Cite several examples of major contributions made by minority individuals.		Reading and writing assignment.

OTHER:

3.3 Other Goals and Objectives

GOALS	OBJECTIVES
The course will emphasize the structural/functional relationships of biology including the actions and inter-actions on a cellular level that are involved in maintaining a dynamic balance within the cell or organism.	Student should be able to: 1. Have a greater appreciation for and understanding of the field of biochemistry. 2. Recognize all types of plants and animal tissues. 3. Understand the relationships between photosynthesis and cell respiration, in terms of bioenergetics. 4. See the relationship between meiosis and mitosis. 5. Identify the basic reproductive cycles and developmental stages of most plant and animal organisms.
Encourage students to such universal truth about biological unknowns. Appreciate life.	

4. Texts and Other Instructional Materials:

Required Text(s):

A text book and lab manual is required, but additional reading in the library is strongly recommended.

The text is "Biological Science", by W.T. Keeton; W.W. Norton and Co.; 1976, 3rd edition. The lab manual is "Laboratory Guide for Biological Sciences," by Keeton, Dabney, and Zollinhofer; W.W. Norton and Co., latest edition.

Each student will be working with expensive equipment like models, microscopes, slides, scilloscopes, physiographs, etc., and he/she will be expected to use care and good judgment at all times.

5. Evaluation Plan and Grading Plan

Evaluation Plan

The student's progress and evaluation of his/her achievement in meeting the course objectives will be determined by the degree of success on two midterm exams, two lab exams, a final exam, a biology research project, and a lab grade based on the formal lab work and lab reports. The percentage that each of the above counts towards the final grade is as follows:

Grading Plan

2 midterm lecture exams at 15% each	30
2 lab exams at 10% each	20
1 final exam at 25%	25
1 biology research project at 10%	10
1 lb grade at 15%	15
	100%

6. Course Policies

State course policies, such as attendance, fees, materials, expectations regarding such activities as field trips, practicum, projects and the like.

1. Attendance is expected at all lectures and labs, and lab work missed due to absence must be completed as soon as possible.

2. A student who misses class consistently for a period of two weeks will be dropped from the class unless the student notifies the instructor of a valid reason for the absences.

3. Lab work is required of all students and will consist of formal lab experiments as well as individual or small group research projects reflecting personal or group interests.

ap/al 03038301

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Biological Science 25LS

Ecology

Course Author(s): Christine Meek

For full and part-time biological science instructors.

1. CATALOG DESCRIPTION

Title of Course:	Ecology
Course Number:	Biological Science 25LS
Unit Value:	4 units
Mode of Instruction:	3 hours lecture/3 hours laboratory

Brief Description of the Course:

An intradisciplinary introduction to the broadly based concepts and principles of ecology which provide a basis for understanding the relationships between organisms and the environment. Basic concepts to be studied in the classroom, laboratory, and field include energy relationships, cycles in nature, population dynamics, and changes in nature. The creative process of scientific inquiry, the aesthetics of science, the limitation and implications of scientific knowledge will be imphasized. Throughout the course, skills in critical thinking, problem solving, and effective learning will be developed.

Articulation Statement:

This course is intended for majors and non-majors of biology.
LMC General Education
Transfer: UC, CSUC (General Education: Area B_2: Biological Science)

2. OVERVIEW and RATIONALE

Overview

This course seeks to develop an intradisciplinary understanding of the biological environment and the interrelationships existing between that environment and living organisms. The primary focus will be given to ecological relationships and the implications of human beings interacting with their environment. The experiences of this course will enable the student to develop an awareness of the environment around him/her and to become informed of how the various components of an ecosystem interact.

This course will be divided into four major units. The first unit will examine the environment with an emphasis on energy relationships and the cyclic processes of the environment. The second unit will cover biological concepts and principles related to living organisms. The third unit will study the impact of the environment on living organisms. The fourth unit will apply the biological concepts and principles of the first three units to an examination of California ecosystems. This approach will provide the principles from which a global perspective of ecosystems will be developed.

In addition, this course will develop an understanding of the process of scientific inquiry and the creative aspects of science. Throughout the course, critical thinking, and the associated reading and writing processes will be incorporated into the learning activities by means of lectures, laboratory exercises, and field trips. Throughout the course, evidence of human disruption of natural processes will be discussed. It is also hoped that a greater appreciation of the natural world will be cultivated in the student.

Rationale

This course was designed to fulfill the requirements and criteria for the Tier One General Education Model at Los Medanos College. The general education focus of this course helps the student to understand the multitude of relationships present on the Earth and to appreciate the beauty of natural balance. Knowledge of the scientific method will help the student learn about the organization of ecosystems and about energy relationships important for cells, organisms, as well as human beings. The student will examine the basic life needs of organisms and the cycles of life and death in nature. The student will also look at the changes in organisms over time as they adapt to different environments. With this knowledge and awareness, the student will be able to make sound decisions on issues and concerns related to the management and preservation of the Earth and its resources. The concepts and principles developed throughout this course are intradisciplinary to the biological sciences and are treated in other courses such as General Biology, Health Biology, and Principles of Biology.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Inquiry into Scientific Knowledge

  A. Observation

  B. Characteristics

    1. Criteria
    2. Discrimination of data

  C. Patterns

    1. graphs - mathematical interpretations
    2. diagrams - cause and effect

  D. Model Formation

  E. Examples - Los Medanos Lake as an Ecosystem Model

II. The Creative Process

  A. Creative Behavior

    1. Curiosity - what makes this thing work?
    2. Knowledge

      a. reading
      b. data gathering through experimentation

    3. Trying out your hypothesis

  B. Blocks to Creativity

    1. Cultural - fear of disturbing traditions
    2. Environmental
    3. Personal - fear of making mistakes

  C. Examples of creative process used in life sciences

    1. DNA model - Watson/Crick
    2. Theory of evolution - Charles Darwin, Wallace, Lamarck

III. Energy Relationships

  A. Photosynthesis

    1. Cell types in different environments

      a. structure of organelles
      b. function of organelles

2. Limiting factors for photosynthesis
3. Chemical reaction for photosynthesis
    a. light reaction
    b. dark reaction
4. Relationship of plants to animals: CO_2 to O_2 relationship
5. Human influences on photosynthesis
    a. increase production CO_2 : the green house effect
    b. reduction in forests like in Amazon River area

B. Cellular Respiration

1. Site of cellular respiration: Mitochondria
2. Distinction between aerobic and anaerobic cellular respiration
3. Relationship of cellular respiration to photosynthesis

C. Energy Transfer in Ecosystems

1. Laws of thermodynamics
    a. energy is neither created nor destroyed
    b. energy transformations are not 100% efficient
    c. implications of eating lower on the food chain
2. Food webs
    a. disruption of food webs by pesticide use
        (1) types of pesticides: chlorinated hydrocarbons, organophosphates, carbonates
        (2) examples of "imbalance" in ecosystem: agriculture
        (3) alternatives: Integrated Pest Management

D. Energy use in Society

1. Types
    a. "hard" energy path: fossil fuels, nuclear
    b. "soft" energy path: solar, wind
2. Problems related to energy use
3. Solutions?

IV. Cycles in Nature

A. Movement of materials in ecosystems

1. Types of materials
    a. carbon
    b. nitrogen - importance of bacteria
    c. oxygen
    d. phosphorous
    e. sulfur

2. Practical examples of "recycling"

   a. composting: personal recycling

B. Movement of water in ecosystems

1. Properties of water
2. Problem of distribution and availability of fresh water

   a. examples: worldwide
   b. examples: California and agricultural water use

C. Ecological succession

1. Terrestrial
2. Aquatic

D. Human interference in these cycles

1. Pollution

   a. air: acid rain
   b. water: domestic, agricultural, and industrial inputs
   c. land: toxic waste disposal

2. Solutions

V. Population Dynamics

A. Characteristics of populations

1. Density

   a. food supply
   b. predator-prey relationships
   c. Internal physiological control: hormones
   d. territory
   e. social hierarchy
   f. disease

2. dispersion
3. natality
4. mortality
5. age structure

B. Population genetics

1. Characteristics of DNA

   a. coding
   b. protein synthesis

2. Genetic drift
3. Genetic engineering: advantages and disadvantages

3.1 Course Content Goal, continued

C. Relationships between populations

1. Symbiotic relationships: mutualism, parasitism, commensalism
2. Competition

D. Application to human population dynamics

1. Social constraints to population growth
2. Other constraints
3. Problem from increased population growth

   a. limited resources
   b. limited space

VI. Interrelationships between organisms and the environment

A. Observations of Darwin

1. Survival of the "fittest"
2. Natural selection

B. Evolution

1. Adaptation
2. Mutation
3. Genetic recombination
4. Isolating mechanisms

C. Species Diversity

1. Basis of taxonomy: what determines a species?
2. Significance to ecosystem balance
3. Endangered species - why?

VII. Ecological concepts applied to California Ecosystems

A. Ocean

1. Characteristics of seawater
2. Organisms' adaptation to ocean environment
3. Environmental problems

B. Estuary

1. Claracteristics
2. Significance as nursery ground for organisms
3. Environmental problems

C. Freshwater Environments

1. Characteristics
2. Types of organisms: adaptations through natural selection
3. Environmental problems

3.1 Course Content Goal, continued

D. Terrestrial Environments

1. Characteristics
    - a. redwoods
    - b. chaparral
    - c. grassland
    - d. oak-woodland
    - e. coniferous forest
    - f. deserts
2. Types of organisms: adaptation to environments by natural selections
3. Environmental problems

LABORATORY AND FIELD TRIP SCHEDULE

Laboratory # 1	Field Exercise on Steps in the Scientific Method
Laboratory # 2	Introduction to the Microscope/Dissecting Scope Slide preparation and analysis of microscopic organisms
Laboratory # 3	Observations on Photosynthesis and Cellular Respiration
Laboratory # 4	Los Medanos pond as an Ecosystem Model
Laboratory # 5	a. Soil analysis for nitrogen, phosphorus, potassium, pH b. Investigation of hormones used in metamorphosis of a blowfly.
Laboratory # 6	Microbial Ecology: Habitat, Isolation, Interaction in soil microorganisms
Laboratory # 7	Analysis of water quality using two techniques (1) MPN (2) Membrane filtration
Laboratory # 8	Sampling the biotic community: sampling techniques and determination of species diversity

Laboratory # 9	Air Pollution Analysis for carbon monoxide, chlorine, fluoride, lead, nitrogen dioxide, sulfur dioxide, total oxidants
Laboratory #10	Diversity and adaptations of insect: Designing insect best escape predation in specified environment
Laboratory #11	Field trip to ocean: Adaptations of shoreline organisms to tidal changes
Laboratory #12	Field trip to San Joaquin/Sacramento River: Investigation of an Estuary
Laboratory #13	Field trip to sewage treatment plant: water pollution prevention
Laboratory #14	Field trip to Black Diamond Mines Regional Park: Investigation of chaparral
Laboratory #15	Field trip to Mt. Diablo State Park: Investigation of grasslands, oak-woodland
Laboratory #16	Field trip to Antioch Dunes: Endangered species

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To consider why the structure of cells dictates their function in the environment.	1. To describe the basic structures and functions of cells.	III. A. 1 III. B. 1	Laboratory #2: Introduction to the microscope and types of cells
2. To recognize the importance of homeostasis or balance in ecosystems	2. To demonstrate an understanding of the biotic and abiotic factors which make up a balanced ecosystem.	III. A. 2, 4 III. B. 3 III. C. 1, 2 IV. A. 1, 2 B. 1, 2 V. C. 1, 2	Laboratory #4: Los Medanos Pond as an ecosystem model
3. To investigate energy's role in life.	3. To explain photosynthesis and cellular respiration.	III. A., B.	Laboratory #3: Observations on Photosynthesis and cellular respiration
4. To introduce the student to the laws that affect energy transformations and for the student to understand the implications of these laws for ecology.	4. To list the laws of thermodynamics and describe how they relate to ecosystem function.	III. C., D.	Classroom discussion
5. To recognize what are basic life needs.	5. To compare and contrast the basic needs of plant and animal cells.	III. A., B.	Laboratory #6: Microbial Ecology: Habitat, Isolation, and Interaction in soil microorganisms.

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
6. To show the interconnectedness among organisms in California ecosystems.	6. To identify the ecological relationships among organisms in California ecosystems	VII. A. - D.	Field trips: Laboratories #11-#16: guided walk of selected ecosystems.
7. To examine the factors that cause populations of organisms to change.	7. To list the components of population dynamics.	V. A. - D.	Class exercise: frog puzzle (determine size of frog population)
8. To introduce the idea of cycles in nature.	8. To recall the biogeochemical cycles of carbon, nitrogen, oxygen, phosphorus, sulfur and water.	IV. A. - D.	Computer Exercise: Pollution Laboratory #5: Soil Analysis
9. To consider the theory of evolution.	9. To explain how evolution, adaptation, and natural selection are mechanisms of species diversity.	VI. A., B., C VII. A. - D.	Computer Exercise: Evolution Laboratory #10: Diversity and Adaptations of Insects. Field trips.
10. To investigate DNA as the "blueprint" of life.	10. To describe the structure of DNA and its function in determining inherited traits.	V. B.	Classroom discussion Movie: DNA, The Blueprint of Life.

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To consider the scientific method as a procedure for investigating the natural environment.	1. To evaluate the scientific method's use as an investigative tool.	I. A. - E.	Classroom discussion
2. To develop the complete use of one's senses.	2. To use one's senses in gathering information.	I. A.	Laboratory #2: Introduction to the microscope and types of cells (extension of sight)
3. To place data into categories.	3. To classify information obtained through observation.	I. B.	Laboratory #1: Field exercise. Using all of one's senses, write a description of a particular environment. Classify observations into biotic or abiotic components. Any patterns? See if the student can develop a model of ecosystem structure and function. Have each student share description, interpretations with other students in a small group. Notice similarities and differences of interpretations. Reasons? Implications?
4. To recognize patterns is data.	4. To observe that patterns might exist in the data.	I. C.	
5. To develop a model that fits the observed pehnomenon.	5. To formulate a hypothesis or theory from observed patterns.	I. D.	
6. To notice any limits in the scientific method.	6. To analyze how a particular frame of reference can lead to different interpretations of results.	II. A. - C.	
7. To appreciate different frames of reference.	7. To describe possible limits in the scientific method as a means of understanding the natural environment.	I. E.	
8. To develop the skills necessary to devise an experiment that uses the scientific method.	8. To use the scientific method in an investigation developed by the student.		Individual conferences on experiment to be done. Small group work throughout semester to act as support group in investigation.

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To introduce the student to the simplicity and beauty of natural systems.	1. To give examples of the simplicity and beauty of natural systems.	VII. A. - D.	Laboratories #11 - 16: Field trips to selected ecosystems.
2. To show the interconnectedness of all life on the Earth.	2. To describe what is meant by the phrase "the web of life"	III. C. 2	Slide presentation showing the relationships among organisms on the Earth, ending with the picture of the entire Earth as seen from outer space.
3. To introduce the student to patterns in nature.	3. To give examples of the elegance of design in nature.	III. A. 1, B	
4. To show the cycles in nature.	4. To propose why there are cycles in nature.	IV. A, B, C	Classroom exercise
5. To wonder at the vast diversity of life on Earth.	5. To examine the incredible diversity of life on earth.	VI. C.	Slide presentation showing examples of different organisms on the Earth. Laboratory #8: Sampling the Biotic community - sampling techniques and the determination of species diversity.

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of Knowledge of the Discipline: Values, Ethics, and Future

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To consider the influence of the theory of evolution on scientific thought.	1. To recall the events that lead to Darwin's theory of evolution and its impact on future research.	VI. A.	Classroom discussion after showing videotape: Ascent of Man: "Ladder of Creation"
2. To recognize the discovery of DNA as a turning point in biological research.	2. To disclose the positive and negative aspects of DNA manipulation - genetic engineering	V. B. 1, 2, 3	Videotape: "Gene Engineers" Clasroom discussion of of implications.
3. To consider the influence of the discovery of DDT and other chlorinated hydrocarbons on the control of pests.	3. To analyze the effects of pesticides, particularly DDT on the environment.	III. C. 2, a	Videotape: "The Insect Alternative." Small group discussion on implications of chemical and biological control of insects.
4. To investigate the research done on insect hormones (pheromones) and their use in biological control of insects.	4. To evaluate the impact of biochemical research in the development of "ecologically safe" pest control.	III. C. 2, a	(Part II) Laboratory #5: Investigation of hormones used in metamorphosis of a blowfly.
5. To explore the implications of "hard" and "soft" energy pathways for society.	5. To discuss the advantages and disadvantages of the "hard" and "soft" energy pathways for planet Earth.	III. D. 1, 2	Classroom discussion of articles by Lovins: Soft energy path and proponents of the hard energy path.

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To assess the students' skills in reading and writing.	1. To read a selected passage from the textbook and to write a summary of the reading.	III. A.	Classroom exercise: Reading and Writing Assessment. Presentation about tutoring for students deficit in reading and writing skills.
2. To see the interrelationships of concepts studied by using the processes of reading and writing.	2. To write a summary of each concept studied and to make relationships to concepts studied previously.	Entire Course	Five minute writing on concept just studied; how relate to previous concepts? (in class) Five minute writing on concept to be studied - what do you know about photosynthesis, for example? Read what wrote to others.
3. To refine the students' skills in reading and writing.	3. To synthesize and make relationships from reading the textbook and other written material and to demonstrate this skill in the writing process.	II. A. 2, a	Essay questions/ Diagram parts of text.
4. To understand the purpose of data collection in the laboratory.	4. To write laboratory reports that demonstrate analysis of results.	II. A. 5	Laboratory/Field Experiments

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
5. To investigate an ecological topic of interest using the scientific method and to write up the results in a formal paper.	5. To write up a student project which demonstrates the use of the scientific method.	I. A - E II. A - C	Individual conference Small group-support for student project throughout semester. Share ideas and concerns. Ask following questions: 1. What to do? 2. How to do it? 3. How am I doing? (progress report) 4. What are results? 5. How organize into paper? 6. Share rough draft of paper with group.

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To develop one's potential as a critical, effective thinker.	1. To use concepts learned in the course to think of solutions to environmental problems facing the world.	III. D. 2, 3 IV. D. V. D.	Small group discussions: brainstorm solutions to select environmental problems, e.g., pesticide use.
2. To use effective thinking in designing and completing a student project.	2. To demonstrate an understanding of deductive/inductive reasoning when designing/analyzing experimental results.	I. A - E II. A.	Classroom discussion Laboratory exercises
3. To see the interconnectedness of concepts studied.	3. To identify relationships that exist between concepts discussed.	Entire course	Give two different articles for student to read. Have student identify main ideas, how articles differ; how articles relate, e.g., articles on photosynthesis and cellular respiration.
4. To recognize the components of the problem-solving process.	4. To analyze the process used by the student in solving problems.	II. A. 4	Classroom discussion of problem solving steps: 1. understand problem 2. devise plan 3. carry out plan 4. look back over work
5. To use the problem solving process.	5. To apply the problem solving process to solving problems posed by laboratory and field exercises.	II. A. 5	Frog puzzle: how to estimate population of frogs in a given area? Small group discussion of results.

OTHER:

4. Texts and Other Instructional Materials Creativity

Required Textbook: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To introduce the student to the creative process.	1. To evaluate the creative process and the cultural, environmental, and personal blocks to creativity.	II. A, B, C	Classroom discussion of research explained in Adams, Conceptual Blockbusting.
2. To encourage the student to discover his/her untapped potential to create.	2. To design an experiment that will test the students hypothesis about a particular observed phenomena.	I. A - E II. A	Individual conference, small support groups.
3. To encourage the student to ask the question "why?" when confronted with a new experience.	3. To design a plan of how animals, plants, and the environment interrelate.	II. A. 1	Laboratory #14: Field Trip to Black Diamond Mines Regional Park. Individual investigations at why plant and animals live where they do. Have students imagine what it would be like to be an animal or plant in this environment. Adaptations, physical constraints? Nutrients?
4. To sharpen one's perceptual abilities.	4. To use all of one's senses in making interpretations about the environment.	II. A. 2, b	Additional field trips.

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences, and Persuasions that have an impace on Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To recognize that there can be different points of view concerning the explanations of nature.	1. To identify different points of view on a particular issue and to recognize their impact on society.	VI. B.	Classroom discussion of evolution and creationism -evidence -historical development
2. To consider how different points of view develop.	2. To identify what information is used to support a particular point of view.	I. A.	Class discussion
3. To become aware of similarities and differences among all living things.	3. To evaluate the following statement: that the basis of similarities and differences found in living things comes from DNA and the action of the environment.	V. B. VI. B, C	Slide presentation of different organisms including humans. Discussion of DNA molecule as the similar link in all organisms.
4. To recognize that in any species there are more similarities than differences in the DNA.	4. To justify that the similarities of DNA among organisms leads to their grouping as a species.	V. B.	Classroom discussion on species diversity - why are there so many species on the Earth?
5. To recognize that differences in a species' DNA provide the material necessary for natural selection.	5. To evaluate how the variations in the DNA of a particular species allows natural selection to occur.	VI. A.	Computer Exercise: Evolution

OTHER:

4. Texts and Other Instructional Materials, continued

Introduction to Environmental Science, Moran, Morgan, and Wiersma
W.H. Freemen, San Francisco, CA., 1980

Other Instructional Material - laboratory handouts, class handouts (unit objectives, articles, instruction sheets)

FILMS

"DNA: The Blueprint of Life" (used to illustrate the structure and function of DNA)

VIDEOTAPES

"The Green Machine" (gives overview of photosynthesis and plant structure)

"The Insect Alternative" (presents history of pest control and present-day alternatives)

"Inside the Golden Gate" (discusses the physical and biological parameters of S.F. Bay and the San Joaquin/Sacramento Delta)

"Gene Engineer" (presents the contraversy over genetic engineering/recombinant DNA research)

"Ascent of Man: Ladder of Creation" (follows Darwin's voyage of the Beagle and Darwin's development of The Origin of Species)

35 mm SLIDES

I. Slide series illustrating California ecosystems; seashore; freshwater; redwood; chaparral, grassland, oak/woodland; coniferous forest, desert

II. Slides on the diversity of plants and animals, the beauty of design in plants and animals and relationships between plants and animals.

COMPUTER PROGRAMS

Evolution: exercise showing the student how natural selection works over several generations of moths

Pollution: exercise on factors affecting water pollution

KITS

Soil testing kits

Water testing kits

Air pollution testing kits

5. Evaluation and Grading Plans

EVALUATION PLAN

There will be four examinations. There will also be additional assignments and periodic quizzes to evaluate the student's progress in fulfilling the states objectives. The General Education criteria will be evaluated in examinations, classroom and laboratory exercises, and the student project. A project will be required that demonstrates how the student applies ecological principles to a particular problem of interest. The project will require the student to read pertinent research on the problem to be studied and to write up the results of the study.

GRADING PLAN:

The final grade will be determined by evaluating the correctness and completion of the stated objectives.

Weighting of tests, assignments, etc.:

3 mid-terms at 100 points each	300
1 project at 150 points	150
Quizzes/assignments/lab reports	150
Final Exam	100
Class participation	50
	750 points

Grades will be distributed as follows:

100 - 90%	Mastery of tests, quizzes, project, class participation will earn an A
89 - 80%	Mastery of tests, quizzes, project, class participation will earn a B
79 - 70%	Mastery of tests, quizzes, project, class participation will earn a C
69 - 60%	Mastery of tests, quizzes, project, class participation will earn a D

59 - below will earn an F

6. Course Policies

State course policies, such as attendance, fees, materials, expectations regarding such activities as field trips, practicum, projects, and the like.

It is expected that the student will attend all class meetings including laboratory exercises and field trips. It will be the responsibility of the student to inquire about any information, handouts, or assignments missed during the student's absence. This should be done during the instructor's office hours. There are no make-up exams or quizzes except due to documented illness or court appearance. All assignments must be handed in on time or receive NO CREDIT.

An assessment of reading and writing skills will be made during the first week of class. Students deficient in these skills will be strongly recommended with tutors.

2.3 Physical Science

2.3.1 Physical Science 5LS: Physical Science

2.3.2 Physical Science 15LS: Introduction to Physics

2.3.3 Physical Science 20LS: Introduction to Chemistry

2.3.4 Physical Science 25LS: General College Chemistry

2.3.5 Physical Science 35LS: General College Physics

2.3.6 Physical Science 45LS: Introduction to Astronomy

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Physical Science 5LS

Introduction to Physical Science

Course Author(s): Ed Rocks

For full and part-time physical science instructors.

1. CATALOG DESCRIPTION

Title of Course:	Physical Science
Course Number:	5LS
Unit Value:	3 units
Mode of Instruction:	2 hour lecture, A-T Lab (2 hrs/week)

Brief Description of the Course:

An introduction to the physical sciences. An intradisciplinary approach to significant concepts and principles in physics, chemistry, astronomy, and earth sciences. Emphasis will be placed on the creative process of scientific inquiry, the aesthetics of science, and on the limitation and implications of scientific knowledge. Throughout the course, and particularly in the audiotutorial laboratory, opportunities will be provided to develop skills in critical thinking, problem-solving, and effective learning.

Articulation Statement:

L.M.C. General Education

2. OVERVIEW and RATIONALE

Overview

Introduction to physical Science is a one semester interdisciplinary course whose major goal is to introduce the student to the basic nature of science through the unifying theme of the interactions between matter and energy. While studying each of the four physical sciences (physics, chemistry, astronomy, earth science) it will vividly show how scientific thought develops and demonstrate that it is an exciting, evolutionary process.

This approach will give students a sense of what "science" is and an appreciation for the relevance of science in today's world. Lab experiments and A-T assignments will enable students to actually experience the scientific process.

The intradisciplinary topics to be studied are: Physics - developing a model for heat; Chemistry - developing a model for chemical bonding; Earth Science - developing a model for earthquakes and volcanoes; Astronomy - developing a model of how stars are born, live and die. The creative nature of scientific inquiry will then be applied to parapsychology and other unexplained phenomena. Finally, the course will conclude with a study of selected issues relating to the impact that science has had on society. The wizardry of science has had a profound effect on the way we live; sometimes for good and sometimes for bad. We will actively explore both those dimensions as they relate to current issues, e.g., the energy crisis. The purpose of this capstone unit is to help students realize that scientists are not infallible and that a concerned citizenry is important to maintain proper controls. The ethical dilemmas of scientist will also be highlighted in this unit.

Rationale

Introduction to Physical Science is organized and taught as a general education course. By its very nature, it is intradisciplinary and includes Physics, Chemistry, Earth Science and Astronomy. Certainly a basic knowledge of the process of science is essential to any generally educated person. This is especially true today when there are so many new breakthroughs happening. Are these all beneficial? Should we challenge any of these? If so, on what basis?

The historical approach, a major component of the class, will provide the learner with a sense of wonder, awe, and appreciation for the great developments scientists from diverse cultures have made in so short a time.

The societal issues which these great advances triggered will also come under close scrutiny. The scientific community is not unique in its resistance to new ideas. Many new scientific ideas were greeted with the same skepticism that greeted new social concepts. These points will be explored because science does not operate in a vacuum. Applying the concepts learned from exploring the past will lead the student to apply them to some of the major issues of the day, e.g., pollution of the planet, nuclear waste and the energy crisis. These challenging issues will help the students to examine and clarify their values. In addition to discussing these issues the students will be required to develop their thinking skills through writing. Besides lab assignments students will be required to write 5 short papers to demonstrate their understanding of some scientific concepts. Reading also plays a large part in the course even though no suitable text could be found. A large number of appropriate readings are assigned with each unit. Test questions, correlated with the readings, require additional interpretation and application to develop thinking skills.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Introduction and overview

  A. The scope of Physical Science

    1. what makes something a science?
    2. what makes something a physical science?
    3. what do each of the four physical sciences study? What do they have in common?

II. The Process of Science

  A. The scientific method

    1. the difference between interpretation and observation
    2. the concept of grouping/classification
    3. regularity patterns and their place in scientific thinking
    4. model formation, the goal of the process
    5. scientific laws
    6. societal models, e.g., economics, relationships, model child, etc., compared to scientific models
    7. the effect of the society or existing culture on the work of scientists

III. The Nature of Physics

  A. What physicist study, how they do it and the creative tools and methods that they use.
  B. Applying the scientific process to the study of heat.

    1. observations, classifications, regularity patterns and, finally, a model.
    2. testing the model - designing a perfect insulator

  C. Implementing the theory - the use of solar energy

    1. learning solar energy and conservation from the Indians of the past and present.
    2. designing solar energy structures based on our model of heat transfer.

  D. Conservation - waste not, want not

    1. what other cultures are doing and have done in the past.

3.1 Course Content Goal, continued

IV. The Nature of Chemistry

A. What chemists study, how they do it and the creative tools and methods they use.

1. the model of the atom, an historical and cultural view.

B. Applying the scientific process

1. the periodic table - an exercise in observation, classification and pattern formation
2. the genius of Mendeleev

C. The Nature of Chemical Bonding

1. using the periodic chart to devise a model to explain chemical reactions and bonding
2. testing the model - the formation of table salt from chlorine and sodium
3. the relationship between physics and chemistry

D. Chemistry as it applies to the home

1. an appreciation of the vast accomplishments that man has made in understanding nature
2. chemistry we encounter everyday

V. The Nature of Astronomy

A. What astronomers study, how they study it and what creative methods and tools they use.

1. an appreciation of the incredible vastness of the heavens

B. Developing a theory to explain stars and the birth of the universe

1. observations of the heavens including an appreciation for the early scientists and their pretelescopic work
2. classification and regularity patterns noticed in stars
3. the formation of a model - competing tendencies, equilibrium
4. testing the model

C. The Evolution of Astronomy

1. new theories: black holes

D. The Relationship Between Physics, Chemistry and Astronomy

VI. Have we discovered everything?

A. What we know

1. the four fundamental forces in the universe
2. the unified field theory

3.1 Course Content Goal, continued

B. Observations, Classifications and Patterns for which no model yet exists

1. the science of parapsychology: esp, psychokinesis, clairvoyance, etc.
2. other unexplained phenomena and their presence in other cultures and other times: ghosts, haunted houses, poltergeist, UFO's, etc.
3. the place of myth and folklore in science
4. possible explanations for these unexplained phenomena

VII. The Nature of Earth Science

A. What earth scientists study, how they study it and the creative tools and methods they use

B. Wegner's Plate Theory

1. the observations - so simple
2. the classifications - so simple
3. the regularity patterns - so simple
4. the model - so simple, but so radical
5. the difficulty any person, group or culture has with a theory that challenges traditional beliefs

C. Working With the Model

1. explaining earthquakes and volcanoes
2. using the model to predict earthquakes and volcanoes
3. new and controversial theories of predicting earthquakes
4. reasonable preparation for the expected big quake in California

D. The Interrelatedness of Physics, Chemistry, Astronomy & Earth Science

VIII. Science and Society; the two-edged sword

A. No Free Lunch

1. the first and second laws of thermodynamics and how they apply to pollution and fossil fuels
2. the problems of progress: acid rain, nuclear waste disposal, carbon dioxide build-up, etc.

B. Alternate Energy Sources

1. solar, geothermal, biomass, etc.
2. the "no free lunch" principle applied to these alternatives
3. the interrelatedness of physics, chemistry, astronomy and earth science as applied to energy sources

C. The Ethical Dilemmas of Scientists

1. who is responsible for misuse?
2. what should be done?
3. who makes that decision?
4. who is "the government?"

D. Past societal, economic, political and social changes caused by technology

E. A look into the future based on the technology of today. Can we avoid the mistakes of the past?

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elementa of the Intradisciplinary Family of Courses

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To give each student an understanding of the concept of order: a. principles of regularity b. principles of causality	1. a. The student will be able to give an example of a regularity pattern from each area (4) of Physical Science	III. B. 1 IV. B. 1 V. B. 2 VII. B. 3	Exp. A-T H-1 The nature of heat energy A-T H-2 Transmission of heat: theory and application
	1. b. The student will demonstrate an understanding by giving one example of a cause and effect for each of the physical sciences.	II. A. 3 II. A. 5 III. B. 1	
2. To assist each student to understand the concepts of scientific laws and models: a. principle of universality b. principle of predictability	2. The student will be able to give six examples of scientific laws and six examples of scientific models, including an historical approach.	III. D. 1 IV. C. VI. A. 1 VII. B. 4	A-T S-1 Model of the Atom A-T S-3 Structure of the Atom Exp. S-6 Forming a Model Lecture on models in science Videotape - The Restless Earth (model) Filmstrip - Continental Drift (model)

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
3. To share the concepts of matter/energy interactions: a. principle of fundamental forces b. principle of fundamental particles	3. a. The student will be able to define and illustrate with examples, the fundamental forces in nature. 3. b. The student will demonstrate an understanding of the present model of the atom, and the theories of fundamental particles.	VI. A. 1 & 2 IV. A. 1 IV. C. 1	Filmstrip - Energy Alternative A-T 5-A Life Cycle of the Stars opposing forces Lecture on Contending forces A-T S-1 Model of the Atom Lecture on fundamental forces
4. To give an understanding of the concepts matter and energy transformation. a. principle of conservation b. principle of competing tendencies c. principle of kinetics d. principle of equilibrium states e. first and second laws of thermodynamics	4. The student will be able to demonstrate an understanding of these topics by explaining how they apply to star formation and decay. The student will also be able to give examples of these processes in today's world, e.g., thermodynamics and the energy crisis	All of V, VIII A.	A-T S A Life Cycle of Stars A-T on alternate energy sources

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
To help the student understand the scientific process as applied to the physical sciences.	The student will demonstrate understanding by being able to apply the four stage processes of scientific problem solving to an issue in each of the four physical sciences. 1. observation 2. classification 3. regularity patterns 4. model construction	III. B. IV. B. V. B. VII. B.	Exp. L-1 Observation of a Candle Exp. S-5 Indirect measurement - A Scientific Necessity Lecture/Demonstration using substances with different densities to develop a theory of why things float may also be used to help achieve the goal Lecture on the scientific process

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Expose students to the awesome vastness of the unknown as well as the known.	1. The student will be able to give the approximate dimensions of the universe and of the atom.	V. A. 1 V. B.	Film: Powers of 10 (inner and outer limits of universe) A-T 5a. Life Cycle of the Stars Lecture on the size of the universe Lecture on unexplained phenomena
2. Appreciate the accomplishment of scientists.	2. Give at least two examples of ingenious methods that scientist have used to solve problems/gather data.	III. C. III. D. 1 IV. A. 1 IV. B. 2	A-T E-1 Alternate Energy Sources - new hopes A-T S-1 Model of the Atom
	3. The student will list a number of the great achievements we have accomplished and illustrate the small amount that we truly understand: a paradox	VIII. E.	Lecture - On the ingenuity man has shown throughout history to use the forces in nature. Lecture on unexplained phenomena

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To understand the influeence science has on the values of the society.	1. Give five examples of how scientific developments have produced a major change in the culture, e.g., light bulb, computers.	II. A. 7 IV. A. 1 VIII. C., D.	Lecture on Science & Social change A-T E-2 The Pollution Game A-T E-1 Alternate Energy Sources
2. To explore the decision making process with respect to the ethics of scientific research.	2. Give and explain three examples of controversial scientific research.	II. A. 7 VI. B. VII. C. 3 VIII. D.	Lecture on "Who Should Decide & Why;" The videotape "Knowledge on Certainty," the sound filmstrip "Science and Society, an inquiry into technology and values," and the sound filmstrip dealing with controversial research, "Carbon Copies" may also be used.
3. To look at where scientific research is headed.	3. Give and explain three cultural trends based on present technological progress, e.g., home computers.	VIII. E.	Lecture Readings from futurist works such as "The Third Wave."

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
Have students thoroughly understand a scientific principle and be able to express that understanding in a written form.	The student will research and and write five (5) short papers illustrating a scientific principle from each of the four physical sciences and one on: Science and Society	All sections will deal with the paper.	A class period will be devoted to explaining how an "original" paper is to be done. After the first papers have been returned, a class will be spent critiquing them to help students better understand the process.
Have students comprehend the required readings and be able to make application of that knowledgew to new situations.	The student will be able to answer questions that require "transfer" learning or process learning.	All parts of the course will foster this objective.	Some essay test questions will be based solely on the reading material and will require interpretational ability to answer.
To assess reading and writing competency.	Each student will read an assigned handout and respond to questions on it within the first week of class.		Students will be checked for reading and writing abilities the first week by the use of a teacher created diagnostic tool.

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
Have students be able to ask insightful questions.	Given a specific problem, each student will be able to generate a list of questions to adequately cover the steps in the scientific process, i.e., they will be able to apply the process to two situations by asking the appropriate questions.	II., III., IV., V. and VII.	Class time will be spent dealing with the skill of asking appropriate questions. Readings from "Teaching As A Subversive Activity" and the videotape "Knowledge on Certainty" may also be used.
To provide opportunities for students to develop their own hypotheses.	Each student will be able to explain why a given experiment didn't give the expected results.	Labs	Lab experiments often give results that differ from pure theory. They will be asked to explain these disagreements.
To expose the students to the process of effective thinking.	Each student will be able to give one theory on how to solve problems effectively	II. A. VI. B. 4	A lecture on creative problem-solving will be given

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
Expose students to some of the geniuses of science.	Give four examples of creative ways in which problems were solved or data obtained.	III. A III. C III. D IV. A IV. B. 2 IV. D V. A, B VII. A, B	A-T S-1 Model of the Atom The following may also be used. Videotape: The Hidden Structure; The Majestic Clockwork; Both deal with man's genius
Allow students to develop some of their own creativity.	The student should be able to devise creative ways to obtain information which is not directly available, e.g., temperature of a star, size of a molecule.	III. A IV. A V. A VII. A	A-T S-6 Forming a Model Lecture on the ingenious tools and methods that are devised to understand and apply the laws of nature.

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
To expose students to the vast array of contributors, both male and female, to scientific development from all countries, races.	The student will list five (5) contributions from different cultures that have contributed to our scientific knowledge.	III. D. 1 V. B. 1 and integrated into the courses where appropriate	The following videotapes may be used: The Majestic Clockwork The Grain in The Stone (these tapes show different cultures and sciences) Classroom discussion of cultural contributions to science - one discovery (culture) builds on the work of another; no race or sex has a monopoly.
To show the students that there are other ways to "view the world."	The student will be able to give three (3) examples of alternate belief systems that exist now or did exist.	VI. B. 2 VI. B. 3 VI. B. 4	The unit on "Other Forces" deals with this topic. Reading from "The Medium, The Mystic and The Physicist" may also be used.

OTHER:

4. Texts and Other Instructional Materials

Required Textbook:

NONE

Recommended Text(s):

NONE

Other instructional materials:

15 packets of reading material are assigned and available at the science A-T desk.

Readings:

1-1 Models

1-2 Scientific Theory

2-1 Heat

3-1 to 3-4 Chemistry

4-1 to 4-4 Astronomy

5-1 to 5-3 Earth Science

6-1 Science and Society

5. Evaluation and Grading Plans

EVALUATION PLAN

Lab and A-T	14 @ 2 points	=	28 points	
Attendance:	1/2 point/class	=	17 "	(max.)
Quizzes:	6 @ 5 points	=	30 "	
Projects:	5 @ 5 points	"	25 "	
			100 points	

The evaluation of each criterion has been specified in the "objective statements" on the previous pages and is reflected on the exams given.

GRADING PLAN:

90 - 100 = A

80 - 90 = B

70 - 79 = C

60 - 69 = D

0 - 59 = F

6. Course Policies

State course policies, such as attendance, fees, materials, expectations regarding such activities as field trips, practicum, projects, and the like.

Attendance:

Attendance is required and earns 1/2 point/class (maximum of 17 points).

Test may be made up within two weeks if missed for a valid reason.

No field trips are anticipated.

Late work will not be accepted unless extraordinary circumstances are involved.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Physical Science 15LS

Introduction to Physics

Course Author(s): Ed Rocks

For full and part-time physical science instructors.

1. CATALOG DESCRIPTION

Title of Course:	Introduction to Physics
Course Number:	15LS
Unit Value:	4 units
Mode of Instruction:	3 hour lecture/3 hour AT lab

Brief Description of the Course:

An integrated study of physical concepts and principles with laboratory methods and techniques. An intradisciplinary approach will be used to develop an understanding of the nature of energy and matter interactions through a study of such topics as motion, sound, light and quantum theory. Emphasis is placed on the creative process of scientific inquiry, on the aesthetics of science, and on the limitations and implications of scientific knowledge. Skills in critical thinking, problem-solving, and effective learning will be developed throughout the course.

Articulation Statement:

L.M.C. General Education
U.C., C.S.U.C. (Gen. Ed. Area B)

2. OVERVIEW and RATIONALE

Overview

Introduction to Physics is a one semester course whose major goal is to enhance the learner's understanding of the scientific wonders of the world in which he/she lives. This will be accomplished using the theme of "matter and energy interactions" to explain these varied and wonderful happenings. The learner will be introduced to the process scientists use to explore both inner and outer space in their quest to unlock the secrets of the universe.

The course will begin with an historical study of motion from Aristotle to Newton. Key figures, their methods, problems, and solutions will be included in this discussion. Emphasis will be given, at this time, to the concept that major changes in scientific developments greatly affect the political, social and economic worlds as well. This process of showing the interrelatedness between science and other parts of "real life" will be included throughout the course whenever possible. Special emphasis will be given to the mode of scientific inquiry: observation, classification, regularity formation and model building. Students will be asked to apply this procedure in the lab and in their own worlds in order to further a deeper understanding of this fundamental process. The problem solving process will be discussed in depth.

Other topics to be studied are: gravity, astrophysics, projectile motion, atomic structure, energy, sound, light-electromagnetic phenomena, nuclear physics, and quantum mechanics. The interrelatedness of physics to chemistry and earth science will be highlighted where appropriate. The topics will be presented primarily through lectures and classroom demonstrations. Reading of the text, homework, A-T and lab assignments will be used to further enhance student learning. The focus of the assignments will be understanding and applying the process to the world around them, the major goal of the course.

Since the study of physics extends over the whole history of mankind, the contributions of different races, nationalities, and sexes will be included where they appropriately fit. In addition, students will be asked to ponder the role of scientists and the ethics of scientific research. For instance, while studying the atom and the atom bomb students will be asked to consider their own values as they relate to these potentially earth shattering developments.

Rationale

Introduction to Physics is conceived and taught as a general education course and, consequently, includes the major themes, or methods of inquiry, common to the other physical sciences: chemistry, earth science, and astronomy.

Each day makes us more and more aware of the fact that we are in the age of advanced technology. All of this development is based on certain basic principles and processes. A knowledge of these basic concepts will enhance anyone's understanding of the world around him/her and make for a more informed citizenry. New breakthroughs call for new and tougher decisions to be made, e.g., nuclear power. A greater understanding of science is needed in today's world to make the best decisions.

This course gives the student the opportunity to learn and practice the process that scientist use in their attempts to uncover the secrets of the universe. In Introduction to Physics it begins with the observation of a ball rolling up and down a hill and proceeds to extract from that simple, repetitive motion some of the universal regularity patterns (laws) that determine the path of space ships. Students are then led to apply these principles of motion to their everyday experiences to enhance their understanding of the world. That process, understanding followed by application, is followed throughout the course. Where appropriate, the contributions of different cultures will be highlighted.

The four major stages in the scientific method (observation, classification, regularity formation and model building) are emphasized in each major topic covered. In addition every effort is made to help students appreciate the intrinsic beauty behind the every advancement. Every scientist has this sense of awe, wonder and appreciation and sharing it is a major goal of this course.

The course involves a great deal of reading, writing and listening. Emphasis is placed on effective thinking in terms of applying the information given to other situations, e.g., relating a scientific law to an everyday machine or event which demonstrates that law. How to read, write and think more effectively will be emphasized in all units in order to enhance the understanding of the basic concepts. Writing assignments to develop cognitive skills are an integral part of the course and are part of the required homework.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. A study of motion from Aristotle to Newton: an introduction to the scientific process

   A. Observation - the first step of all sciences
   B. An historical approach to motion

      1. Aristotle - unquestioned authority
      2. Galileo - the first modern scientist
      3. Newton - the place of genius

   C. Classification and Regularity Patterns

      1. Falling bodies
      2. Newton's laws of motion and their application to everyday phenomena

   D. Appreciation of the insight, genius, and beauty of the laws of motion and their discoverers; a look at how they affected their societies and vice-versa

   E. Gravitation - an intuitive jump in scientific thinking

      1. Newton's genius
      2. Universal law of gravity
      3. Models in science based on gravity: tides, gravitational fields, Einstein's theory, black holes
      4. Astrophysics - where astronomy and physics meet in pursuit of the laws of the universe

   F. Interaction of two laws: motion and gravity

      1. Projectile motion
      2. Satellites - Newton's theory becomes a reality
      3. Weightlessness - a paradox to analyze

II. The model of the atom from Aristotle to Bohr

   A. Historical development: early ideas and models

      1. Observations made
      2. Classifications made
      3. Regularity patterns developed; Coulomb's law
      4. Models from the early Greeks through 1930; limitations of models

   B. Using the atomic models to create other models

      1. Elements, compounds and mixtures
      2. How chemistry interacts with physics in the pursuit of the laws of the universe

3.1 Course Content Goal, continued

III. Energy and Power

- A. Observation and classification of energy sources
- B. Regularity patterns: work and power
- C. Some forms of energy and their relationship to work
  1. Mechanical energy
  2. Potential energy
  3. Kinetic energy
  4. Kinetic energy and momentum
- D. Efficiency
  1. The laws of thermodynamics
  2. Understanding the efficiency of everyday devices, e.g., cars
- E. Sources of "Energy for Living": electricity, gas, heat
  1. Fossil fuels - supply, demand and consequences
  2. Alternate fuels - availability and consequences
  3. Nuclear Fission - availability and consequences
  4. Nuclear fusion - availability and consequences
- F. The energy crisis - is it real?
  1. Exponential growth/doubling time
  2. History of energy consumption
  3. Technological solutions - will they work?
  4. Conservation - applied physics; learning from our ancestors
  5. Some of the political, social and economic results of the invention of the gas engine and the present crisis in available energy
  6. Technological developments that transformed society

IV. Wave Motion

- A. Pendulums
  1. Observation and technical terms
  2. Regularity patterns
- B. Classification of waves
  1. Longitudinal
  2. Transverse
- C. Regularity patterns
  1. Interference patterns, standing waves
  2. The special use of waves in earth science to build earthquake models
- D. The Nature of Sound
  1. Generating sound waves
  2. Regularity patterns, and the model interference patterns, standing waves, resonance
  3. Application to everyday phenomena - speakers, echoes

3.1 Course Content Goal, continued

E. Electromagnetic Waves

1. Spectrum of E/M waves
2. Use of infrared, radio, X-rays, and gamma rays

V. Modern Physics

A. Light-wave or ray?

1. Wave theory: historical approach

B. Observations/patterns

1. Diffraction
2. Interference
3. Polarization

C. Birth of the quantum theory: historical background

1. Photoelectric effect
2. Spectra - clue to the atoms
3. Energy waves - a creative jump forward

D. Wave Mechanics

1. Correspondence principle
2. Uncertainty principle
3. Electron: wave or particle

E. Nuclear Physics

1. Strong and weak forces
2. Isotopes - their formation and use
3. Radiation - classification, patterns and models
4. Half-life - observation and regularity patterns
5. Carbon dating - a unique application of the half-life model
6. Nuclear fission - reactors
7. Nuclear fusion - from the bomb to electricity.

VI. Ethics in Science

A. 1. The nature of ethics
2. The role of science; controversial research; ethical implication
3. Science as it relates to politics, environment, etc.
4. Who decides?
5. What history has to offer us
6. Where we are headed - the 1980's and 1990's

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
	Each student will be able to:		
1. To give each student an understanding of the concepts of order: a. principles of regularity	1a. Give and describe examples of regularity patterns found in physics.	I. C II. A III. B IV. C V. E 4	Lecture on Scientific Method Lab on Newton's Laws
b. principles of causality	1b. Explain cause and effect relationships using the principles of physics.	I. F III. D	The Videotape: dealing with order in nature, "Grain in The Stone" may also be shown
2. To assist each student to understand the concept of scientific laws and models: a. principle of universality b. principle of predictability	2. Each student will be able to give examples of scientific laws and to explain scientific models. The student should be able to explain areas in which the models are not complete.	I. C 2 I. E 2 II. A III. D V. A	Lab - "Forming A Model" Lecture on Models in Science and lecture on Scientific Laws. The Videotape: dealing with scientific models, "Majestic Clockwork" may also be shown.
3. To share the concept of matter energy interactions: a. principle of fundamental forces	3a. Each student will be able to define and illustrate with examples, the fundamental forces in nature.	I. E 2 II. A V. E 1	The Videotape: dealing with the atom, "World Within World" may also be shown.
b. principle of fundamental particles	3b. Each student will be able to give the present model of the the atom and discuss the theories of fundamental particles.	V. D II. A	Slides of Atomic Models Lecture on fundamental forces.

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
4. To give an understanding of the concept of matter and energy transformation or evolution: a. principle of conservation b. principle of competing tendencies c. principle of kinetics d. principle of equilibrium states	4. The student will be able to explain the equilibrium state reached in falling bodies. The student will be able to explain the competing forces at work in satellite motion and in the nucleus.	I. C I. F III. C V. E 1	Lecture - Newton's Laws of Motion Demonstration - Guinea and Feather Falling in a Vacuum. Lab - Acceleration/velocity on an air track AT unit on Projectile Motion Film loop - Distance, Time and Speed
e. first and second laws of the thermodynamics	Each student will be able to apply the laws of thermodynamics to a current problem in the society.	III. D	Reading from 2LS text by Miller may be used Filmstrip: Energy Part I - Power Struggle Part II - Future Power may also be shown Lecture on Thermodynamics

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To help the student understand the stages of the scientific process:	1. Each student will be able to apply the four stage process of scientific problem solving to three different topics in physics, e.g., the nature of light	I. A, C, E, 3 II. A, B III. A, B IV. A, B, C	Lab - Forming A Model Videotape: Grain in The Stone (Structure) may also be used.
Observation, classification, regularity formation and model construction.	The student will be able to list, define and give example of all four steps of the scientific process.	II. A, 4	Lecture on scientific methodology. Videotape: Majestic Clockwork (models) may also be used.
To help the students understand the evolutionary nature of science	The student will give two (2) examples of cyclic and evolutionary nature of science.	I. D III. F	Film: Anti-Matter - introduces a new frontier.
To help the students understand the limits of science	The student will give two (2) examples of scientific advancements that can be a boon or bane depending on their use or abuse.	IV. E. 2 V. E VI. 1	Filmstrip: Science and Society - an inquiry into technology and values. Lecture on "There is no Such Think as a Free Lunch"

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
Expose students to the vastness of both the macro and micro worlds and also to the unknown.	Each student will express an appreciation of the vastness of the universe and the spaciousness of the atom and man's creative genius in discovering these characteristics.	I. E. 4 II. All	Film: Powers of 10 Guided Imagery From human size to sub-atomic size and edges of universe. Calculation of a light year and the distances to other galaxies.
Appreciate the genius of science in developing such creative and imaginative theories and models.	Each student will be able to give examples of ingenious methods or theories that scientist have used to solve problems or to gather data.	I. E	Lecture, when appropriate, on the lives of prominent scientists.
To appreciate man's ability to take an idea and bring it to fruition.	Show the development of an achievement from conception to completion.	I. F. 2 III. E. 3	The Videotape: dealing with the development of Astronomy The Starry Messenger may also be used.
To hypothesize what our future may be like based on our ability to conceive ideas now.	The student will make his/her own list of predicted future changes based on current technology and ideas, and explain the reasoning behind the list.	III. F. 6 VI. A. 2	Read: Excerpts from: The Third Wave and Future Shock may be used A-T Energy, Sources and Man's Needs.

OTHER:

3.2 **Criteria Related Goals: Criterion:** Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline; Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To recognize the influence science has had on the values of the society	1. Give examples of how scientific developments have contributed to a major change in the culture, e.g., electricity.	I. D III. F. 6	Lecture on how scientific discoveries force value clarifications. The Videotapes: "Drive For Power" (Industrial Revolution) and "The Harvest of the Seasons" (Machines) & Hidden Structure (Bronze & Iron) may be shown.
2. To explore the decision making process with respect to the ethics of scientific research.	2. Students should be able to state their ethical values on a particular scientific issue e.g., genetic engineering, nuclear weapons.	III. E. 3 III. E. 4 VI. all	Videotape: Knowledge or Certainty - dealing with ethics & war, may be shown. Lecture on Ethics.
3. To look at where scientific research is headed.	3. Give and explain 3 cultural trends based on present technological progress, e.g., working at home using computers.	VI. A 6	Readings from: The Third Wave may be used. Lecture on Future Possibilities

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To require homework assignments, research papers and exercises that require writing skills.	1. In addition to the required homework, each student will research and write four short papers illustrating four scientific principles discussed in class or in the text.	All parts	Research papers Homework assignments Lab reports
2. To require reading in a college level text and in supplementary books, articles.	2. Demonstrate text comprehension by answering questions which require a depth of understanding.		The text has many exercises designed to foster "transfer learning" e.g., take a principle and apply it in other areas. Many of the homework assignments will include questions of this type. These will also aid in developing critical thinking. Students in need will be referred to the reading and writing lab and to a tutor, when available.
3. To evaluate each student's ability to read and write at the necessary level.	3. During the first week, each student will demonstrate the ability to read and write by answering questions from an assigned reading.		

OTHER:

3.2 Criteria Related Goals: **Criterion:** Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
Have students learn how to ask insightful questions and to think like a scientist by giving them practice in drawing conclusions from observed data, patterns.	Given a specific topic/problem each student will be able to generate a list of questions to adequately cover the steps in the scientific process. e.g., they will be able to apply the scientific thinking process to two situations by asking the appropriate questions.	All parts	Lecture, experiments in which they will have to use critical thinking in order to answer the questions asked, e.g., forming a model. Classroom demonstrations which they will view and then be asked to explain "What happened" and how they arrived at their conclusion e.g., inertial ball. Film loop: Astronauts In Space - analyzing a paradox. Unresolved, technological issues will be brought up and discussed, e.g., nuclear waste disposal.
Have students understand that many scientific theories are just theories.	Given the known facts, students will develop theories to account for these facts.	All units will offer examples for this process.	
Have students understand the difference between science and technology	Students will be asked to develop technological selections to problems in which the scientific principles involved are clear, e.g., nuclear fusion. (While no solution will be truly effective, it will cause them to think creatively and effectively.		

OTHER:

3.2 Criteria **Related Goals**: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
Expose students to some of the genius of science.	Be able to explain examples in which problems were solved or new theories formulated in an especially creative way.	I. D I. E II. 4	Lectures will include references to such theories Videotape: Majestic Clockwork - dealing with understanding the workings of the heavens, may be show
To help them appreciate that creativity and persistance go hand in hand.	Be able to cite examples and come up with original theories.	II. V	Videotape: World Within World - showing the work of Mendeleev in developing the periodic table.
To develop her/his own creativity.	Come up with explanations for Lab exercises and classroom demonstrations.	All units	Use of appropriate questions from the text and classroom demonstrations will force students to come up with creative explanations. Students will be asked to explain why their lab results are not those predicted by the text.

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
To expose students to the vast array of contributors, male and female, from all countries, races, to the knowledge of science.	Each student will identify the nationality of the major contributors to science that are discussed in the class.	I. B I. D I. E	Biographical and historical readings from the text and other books, e.g., Physics For The Inquiring Mind.
To explore some areas in which the beliefs of a culture hindered or helped the advancement of science.	Be able to identify cultural beliefs that have limited or supported scientific development both in the past and in the 1980's.	II. A III. F 2 III. F 5 III. F 6 VI. A 2 VI. A 3	The Videotape: Starry Messenger, which gives a history of the theories of the heavens, may be used. Readings from "The Third Wave" may be used.

OTHER:

3.3 Other Goals and Objectives

GOALS	OBJECTIVES
Teach the metric system	Each student will be able to convertfrom the English system to the metric system and vice-versa. Each student will be able to convert one metric quantity to another metric quantity.

4. Texts and Other Instructional Materials

Required Textbook:

CONCEPTUAL PHYSICS, BY P. HEWITT

Other Instructional Materials:

1. Autotutorial Materials

   Slides, tapes, filmstrips, film loops that the student watches on his/her own.

2. Videotapes from the Ascent of Man series will be used.
3. Selected reading assignments, other than the text, will be given when appropriate.
4. Lab experiemtns are part of the course.

5. Evaluation and Grading Plans

Students will be evaluated by means of the instruments specified below in the evaluation plan.

EVALUATION PLAN

Five quizzes and final	50 points
A-T Units	15 "
Lab Experiments	15 "
Research Papers	20 "

Students will be assigned a grade for the course according to the total point scale given below as it relates to their level of mastery and/or performance in meeting the learning objectives.

GRADING PLAN:

90 - 100 = A
80 - 89 = B
70 - 79 = C
60 - 69 = D
0 - 59 = F

6. Course Policies

Attendance is essential but no punitive policy exists.

Tests may be made up within 2 weeks if missed for a valid reason.

All assignments must be completed within the dates specified on the handout the students receive.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Physical Science 20L

Introduction to Chemistry

Course Author(s): Angel Juarez, Michael Schweickert

For full and part-time physical science instructors.

1. CATALOG DESCRIPTION

Title of Course:	Introduction to Chemistry
Course Number:	Physical Science 20L
Unit Value:	4 units
Mode of Instruction:	3 hr. lecture; 3 hr. lab; 1 hr. audiotutorial lab.

Brief Description of the Course:

An integrated study of chemistry concepts and principles with laboratory methods and techniques. An intradisciplinary approach will be used to develop an understanding of the structure and properties of organic matter and of biochemical processes. Emphasis will be placed on the creative process of scientific inquiry, on the aesthetics of chemistry, and on the limitations and implications of scientific knowledge. Skills in critical thinking, problem solving, and reading and writing will be developed throughout the course.

Articulation Statement:

L.M.C. General Education

2. OVERVIEW and RATIONALE

Overview

This course introduces to the student the basic nature of science, and the powers and limitations of the scientific method as a tool for human inquiry. The ethical implications of chemical science for modern societies will be explored, along with historical examples illustrating the effect of prevailing social paradigms upon the development of chemistry. The student will receive an elementary introduction to the structure of matter, beginning with quarks and then building up to, as well as concentrating on, complex organic and biomolecules. The physical, chemical, and biological properties of molecules will be discussed from the standpoint of fundamental interparticle forces and reaction driving forces, thereby providing the student an ability to predict the properties of previously unencountered substances. A limited number of basic concepts in nutrition, pharmacology, and toxicology will be covered, and then these, along with other chemical principles, will provide a technical base for discussions of the ethical implications of chemistry for society.

The "discovery" approach to learning will be emphasized throughout the course by the use of various teaching strategies, including: extensive question/answer lecture discussions; brief, non-graded (but collected) formative writing assignments in response to chemical problems and puzzles which embody the main concepts about to be covered in a new unit; "open-ended" lab exercises; and lengthy problem-solving assignments which allow the students to explore their higher cognitive abilities.

Rationale

The knowledge and technology deriving from modern chemical science are powerful tools for change. Thus, chemistry does not operate in a vacuum, but rather interacts profoundly with its physical and social environment. This course attempts not just to convey an introductory understanding of the methods and principles of chemistry, but also weaves throughout its presentation illustrations of the aesthetic and ethical implications of chemistry, as well as explores the roles of synthetic, analytical, creative, and other modes of human thought in the creation of new chemical knowledge. This course introduces the student to the important themes unifying the so-called "physical sciences" (astronomy, chemistry, geology, physics), including the concepts of order-disorder, scientific methodology, and the apparent laws governing the interactions of matter and energy. Students will be provided opportunities to develop their reading, writing, and thinking skills, through a combination of traditional and more novel individual and group activities.

Hence, the basic thrust of this course and the reason for its inclusion in the LMC Tier I Program is to provide the student with basic scientific knowledge and technical skills, along-with a dynamic variety of values, attitudes, experiences, and perspectives with which he/she can better understand and confront our technically-complex society.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Introduction to the Scientific Method

- A. The Progressive Nature of Scientific Inquiry
- B. The Method of Inquiry
  1. Observation, perception, classification, objectivity, and accuracy in descriptions
  2. Regularity Formulations
  3. Model Construction - Theory and Prediction; Paradigms
  4. Experimentation
     - a. Experiment design
     - b. Laboratory technique
     - c. Laboratory safety
     - d. Laboratory notebooks - keeping accurate and informative records of laboratory activities
  5. Chemical Synthesis and Chemical Analysis
- C. The Power and Limitations of the Scientific Method
  1. Science as a "tool"
  2. Ethical implications of Science
  3. Risk - Benefit Analysis
  4. Aesthetic Implications of Science
  5. The Role of Various Cognitive Processes in: The scientific method; other disciplines; the general learning process

II. Introduction to the Structure of Matter

- A. Quarks, Subatomic Particles, and Coulomb's Law
- B. Structure of Atoms
  1. Electron Shells and Lewis Dot Structures
  2. Octet (inert gas) Rule
  3. Origin of the Elements
- C. Structure of the Periodic Table and Element Families
- D. Structure of Molecules
  1. Ionic and Covalent Bonding
  2. Covalency Rules
  3. Lewis Structures of Molecules

III. Classification of Organic Compounds into Families

- A. Functional Groups and Nomenclature
- B. Isomerism

3.1 Course Content Goal, continued

IV. Molecular Interactions

A. Covalent Bonds
   1. Electronegativity
   2. Bond and Molecule Polarities

B. Interparticle Forces and Physical Properties
   1. States of Matter
   2. Trends Within Families
   3. Trends Between Families

C. Chemical Properties - Interconverting the Organic Families
   1. Reactions and Mechanisms
      a. Organic Synthesis
      b. Organic Analysis
   2. Heat Changes in Reactions
      a. First Law of Thermodynamics
      b. Coordinate Diagrams; Bond Breaking and Bond Making
   3. Driving Forces for Chemical Equilibrium
      a. Second Law of Thermodynamics
      b. Disorder and Bond Strengths
   4. Kinetics

V. Classification and Structure of Biomolecules

A. Carbohydrates

B. Lipids

C. Proteins

D. Nucleic Acids

E. Vitamins, trace elements, and Ensyme co-factors

F. Some basic concepts of nutrition
   1. Food Analysis (Lab Exercise)

VI. Transformations of Biological Molecules

A. Catalysis and Enzyme Action

B. Metabolism
   1. Anabolic and Catabolic Pathways
   2. Controls and Energetics
   3. Some Basic Concepts in Pharmacology and Toxicology
      a. Actions of some selected drugs and toxins
      b. Carcinogenicity, Mutagenicity, Teratogenicity
      c. Exposure Levels and Potency

3.1 Course Content Goal, continued

VII. The Risks and Benefits of Chemicals and Chemical Technology for Society

- A. The Pesticide Dilemma - Toxicology and World Food Supply
- B. Plastics and Detergents
- C. Genetic Engineering
- D. Chemical Warfare
- E. Drugs - Their Use and Abuse

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

General Statement for Physical Sciences: The major theme threading and interrelating the disciplines comprising the physical sciences is conveyed by the following:

"Within the physical sciences there exists a continual search for order through discovering universal laws governing the interaction of matter and energy and their transformation(s)."

The concepts and principles which form the intradisciplinary elements of the physical sciences will be introduced to the student by this course. These concepts and principles are as follows:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To teach the intradisciplinary elements of the intradisciplinary family of courses.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
CONCEPT: ORDER Principle of Regularity Principle of Causality	1. The student will understand the fundamental order and structure unifying the chemical elements. The student will be able to name the elements significant to organic and biochemistry, and relate their atomic structure to position in the periodic table.	I. b. 1, 2, 3, II. a, b, c V. e	Lecture Text Reading & Homework Film - "Chemical Families"
	2. The student will understand the order pervading the millions of organic compounds, and on the basis of their functional groups classify organic compounds into families. The student will then be able to apply the rules of nomenclature to provide accurate, informative names for a substantial number of these compounds.	I. b 1, 2, 3, 5 II. d III. V. a,b,c,d,e	An exercise in the "Scientific Method" (lab) A-T Modules #101-106 #327 Lectures Text reading & homework

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
CONCEPT: SCIENTIFIC LAWS AND MODELS Principle of Universality Principle of Predictability	1. The student will be able to predict the physical, chemical, and in some cases, biological properties of elements and compounds, on the basis of his understanding of the principles governing chemical structure, and electrostatic interactions.	I. b, c II. III. IV. V. VI.	Lab: "Exercise in the "Scientific Method" A-T Modules #110-115 Lectures Text Reading & Homework
	2. The student will understand that a scientific prediction which fails signifies a weakness in the current model for that aspect of physical reality, implying that the model is either wholly or in part, incorrect (See Criterion #2).	I.	Lab: Exercise in the "Scientific Method" Lectures - Historical Examples (e.g. Demise of Vitalism in 1828) Discussions

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To teach the intradisciplinary elements of the intradisciplinary family of courses.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
CONCEPT: MATTER-ENERGY-INTERACTIONS Principle of Fundamental Forces Principle of Fundamental Practices	1. The student will understand the roles of gravity and pressure in making possible certain laboratory techniques.	I. b. 4. (b)	Laboratory activities
	2. The Student will have an elementary understanding of the nuclear and electrostatic forces existing within atoms, which bind together the various fundamental articles.	II. a, b	Lecture Text Reading & Homework
	3. The student will have an elementary understanding of the electrostatic forces between molecules which determine their physical and chemical properties.	II. IV. V. VI.	Lecture Text Reading & Homework A-T Modules #110-115 Lab Exercises

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
CONCEPT: MATTER & ENERGY TRANSFORMATIONS AND EVOLUTION	1. The student will know current theories regarding the origin of chemical elements	II. b, 3	Lecture and Handouts on Nucleosynthesis in Stars and the Big Bang
Principles: Conservation Competing Tendencies Kinetics Equilibrium States First and Second Laws of Thermodynamics	2. The student will be able to understand the first law of Thermodynamics as it applies to heat changes during reactions.	IV. c, 2 VI. b, 2	Lecture Text Reading & Homework Lab Exercises
	3. The student will understand that reaction spontaneity and the position of equilibrium are determined by the natural tendencies toward stable bonds and disorder. The student will realize that these two tendencies can often compete with each other.	IV. c, 3 VI. b, 2	Lecture Text Reading & Homework Lab Exercises
	4. The student will understand the role of catalysts, particularly enzymes, in speeding up chemical reactions.	IV. c, 4 V. c, e VI. a, b	Lecture Text Reading & Homework Lab Exercises

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
The method of scientific inquiry will be introduced and illustrated, along with its attributes and limitations.	1. a. The student will be able to list, define, illustrate, and apply the steps involved in typical scientific inquiries.	I. b	Lecture Handout on the Scientific Method Lab: "Exercise in Scientific Method"
Gaps in current scientific knowledge will be stressed whenever possible.	b. The student will appreciate the progressive and cyclic nature of science.	I. a, b	Text Reading & Homework Historical Examples including accounts of Kekule's Dream, etc.
	2. a. The student will understand the role of science as a powerful tool for change, capable of both use and abuse.	I. c VII.	See Item 1 under "Implications of Knowledge"
	b. The student will realize that science generates questions of ethics, inquiry about which and answers to which lie in part outside the reaches of scientific inquiry.	I. c VII.	See Item 2 under "Implications of Knowledge"
	3. The student will contrast the Scientific Method other modes of inquiry.	I. VII.	Lecture & Discussions Problem Assignments Discussions on Ethics and Aesthetics

3.2 Criteria **Related Goals:** Criterion: Modes of inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenenous to the Discipline.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
	4. The student will be impressed with the paradox, that as the "island" of scientific knowledge expands, the "shoreline" of wonder and curiosity lengthens.	All content	(All modes)
	5. The student will see the role of prevailing paradigms in shaping and limiting scientific inquiry, and historical examples of individuals who challenged certain paradigms and revolutionized scientific knowledge.	I. II. III.	Reading Assignments, and lecture regarding individuals such as Wohler, etc.

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
The student will be exposed to the complexity of matter, and then the order and simplicity that science can find in this "chaos."	1. The student will describe the value of the scientific method as an intellectual activity. 2. See objective #4, "Modes of Inquiry"	I. b, c II. III. IV. b, c, V.	(All modes) Handouts from sources such as Godel-Escher-Bach
The elegance of synthetic organic chemistry will be displayed.	1. The student will describe the utility of and the creativity involved in synthetic chemistry.	I. b, c IV. C, 1 V. VII.	Problem Sets Lecture - Text Readings
	2. The student will employ analysis and synthesis as tools for creative problem solving.		Lab: "Synthetic and Creative Thinking"
Compounds which are pleasing to the eye and nose will be created and contemplated in ther laboratory.	The student will successfully carry out synthetic procedures, ending up with pleasing and useful substances.	I. b, c	Laboratory: 1. Prep. of esters 2. Prep. of cosmetics e.g., handcream, etc. 3. Dyes and Dyeing 4. Preparation of Nylon

OTHER:

3.2 Criteria Related Goals: **Aesthetics** of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
The ingenuity and creativity of several chemists will be highlighted with historical examples.	The student will describe the elegance of a brilliant bit of research.	(All areas)	Reading & discussion of short biographical sketches of Pasteur, Ehrlich, Pauling, Woodward, Kekule, etc.
The connection of science to the arts will be explored.	The student will see the linkage between chemistry and the arts.	(All areas)	1. Poems, music, pigments, dyes, etc. involving interesting chemistry will be presented throughout the course for the student's contemplation. 2. Essay/Report on the uses of chemistry in the arts.

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. It will be shown that the process and fruits of chemical science are tools for potentially dramatic change in the conditions affecting people's lives.	1. The student will illustrate how chemistry is a powerful tool, which is capable of use and abuse.	I. c VII.	Lecture-Discussion of historical and ficticious examples of the ethical implications of chemical knowledge. Lab: "Implications of Chemistry for Society and the Environment"
2. Some profound ethical questions posed by chemical science will be explored and the role of science in the risk-benefit analysis will be illustrated.	2. The student will identify examples showing that science generates persistent ethical questions, inquiry about which and answers to which lie in part outside the reaches of purely scientific inquiry.	I. c VII.	Man and Molecules Tapes, Readings and Discussion, Essay Assignment regarding such issues as chemical warfare, pesticide, drugs, etc.

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
	3. The student will be able to write a balanced and penetrating risk-benefit analysis of some ethical issue involving chemical science. (This assignment will involve considerable reading and research).	I. VII.	Essay on an ethical issue, following the Lab: "Implications of Chemistry" Formal essays will be graded with attention given to: content, structure, and mechanics (with decreasing emphasis, respectively.)
III. 1. To assess the sufficiency of the learner's reading & writing skills for meeting the demands of the course.	To know the sufficiency of reading and writing skills for mastering the tasks of this course.	Done during first few weeks of the course.	1. Essay questions on first homework assignment (writing assessment).
2. Inform learners of tutorial support system for improving reading and writing skills.			2. In-class, on the spot summaries of a selected passage from the text. (reading assessment).

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objectives: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
This course will specify what the scientific method is, and then illustrate its uses and limitations.	The student will develop an ability to apply the scientific method in laboratory exercises and in solving some problem in their everyday lives.	I.	Lab: "Exercise in the Scientific Method" Homework Projects
Risk-benefit analysis will be used to explore ethical issues.	The student will realize that the ultimate answer to an ethical question depends upon inquiries which lie both within, and outside of, the scientific method.		See "Implications of Knowledge"

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
Many cognitive processes will be defined and illustrated and opportunity provided for the student to use and develop each to at least some extent in problem solving, including:			
1. memory - storage & retrieval 2. logic - inductive and deductive 3. pattern recognition and analogous thinking 4. analysis 5. synthesis 6. enlightened guessing and intuition 7. creative thought 8. evaluation - moral, scientific, and aesthetic 9. divergent and convergent thinking 10. spatial perception and mapping 11. persistence and concentration	1. The student will name and illustrate various cognitive processes. 2. The student will tune up her cognitive repertoire by applying these skills in the act of problem solving.	I. c. 5 (And all other content)	Illustration in lecture and lab discussions. Handouts on Learning Levels and Cognitive Processes "Level 1, 2, and 3 Puzzles" from Brain Power Labs: "Exercises in Scientific Method" "Synthesis and Creativity" projects (And, of course, all other class assignments to some degree)

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
The student will be exposed to historical examples of individuals who have contributed to science by their creative and elegant experimental art or by presenting new theories which challenged prevailing paradigms.	The student will list and illustrate the "steps" involved in creative problem solving.	(All areas)	1. Handouts on the creative process. Lectures & reading 2. Assignments regarding such individuals as Pasteur, Kekule, Fischer, Woodward, etc.
The instructor will make many attempts to tie together chemistry and the arts, showing how a knowledge of each field enhances one's appreciation for the other.	The student will illustrate the interconnectedness of knowledge.	(Instructor's discretion)	1. In-class reading of poems, etc., relevant to chemistry subject matter. 2. Essay/Report on the uses of chemistry in the fine arts.
The student will be provided an opportunity to develop his/her own creative abilities.	The student will develop those cognitive skills (e.g., divergent thinking, synthesis, etc.) which characterize the creative thinking process.	I. c. 5	1. Formative writing assignments 2. Group Problem-Solving Games and Puzzles 3. "Level 1,2,3 Puzzles" 4. Project: "Synthetic & Creative Thinking"

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions That Have an Impact on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
This course will explore a few historical examples where the progress of science was hindered by: 1. prevailing paradigms which had a basis in some dominant racial, cultural, or religious beliefs;	1. The student will realize that the ability to gather accurate observations and propose valid theories depends upon the individual's ability to set aside his/her own biases and approach an inquiry with an objective mind.	I. VII.	1. Biographical and historical readings e.g., Wohler and the Vitalism Theory.
2. prejudice against a scientist on the basis of his/her ethnic, sexual, or religious background.	2. The student will be aware of various sociological barriers to a more representative profile of women and minorities in the field of chemistry.		2. Salary Surveys from Chemical and Engineering News
Contributions to chemical knowledge made by women or members of minority groups will be stressed when appropriate.	The student will recognize that science is a mode of inquiry which can be effectively practiced by any social group barring external restraints.	(All areas)	For example, biographical sketches of Khorana, Yalow, Franklin (The Double Helix)

OTHER:

4. Texts and Other Instructional Materials

Required Textbook:

Fundamentals of Organic and Biochemistry, Callewaert and Genyea, Worth Press, 1980.

Audio-Tutorial Materials:

1. Slide-tape programs, film loops, molecular model kits, and workbook modules are available for personalized instruction.
2. Audio-tapes from the Man and Molecules series, produced by the American Chemical Society.
3. It is expected that some computer-assisted instruction modules will be available by Fall, 1982.

Audio-visual Materials:

1. CHEM Study Fily Series From Modern Learning Aids.
2. Transparencies prepared by the instructor.

Laboratory Assignments:

There is no single appropriate laboratory text for this course. All lab assignments will be developed into handouts by the instructor.

Handout Reading Assignments;

Reading assignments pertaining to the General Education Criteria Content (other than from sources mentioned above) will be composed of handouts developed by the instructor, including material from sources such as the following books and periodicals (not an exhaustive listing!):

Double Helix, James Watson

Of Molecules and Men, Francis Crick

Blood of the Lamb, Peter De Vries

Cat's Cradle, Kurt Vonnegut, Jr.

Godel, Escher, Bach: An Eternal Golden Braid, Douglas R. Hofstadter

The Dancing Wu-Li Masters, Gary Zukar

Microbe Hunters, Paul de Kruif

4. Texts and Other Instructional Materials, continued

Environmental Science, Turk, Turk, Wittes, Wittes

Science, Scientists, and Society, edited by William Beranek, Jr.

"Journal of Chemical Education"

"Chemistry and Engineering News"

"Science"

"Scientific American"

"Bulletin of the Atomic Scientists"

"Smithsonian"

"The New Yorker"

"Omni"

"National Geographic"

Departmental, Robert Frost

Brain Power, Albrecht

Current News Articles

5. Evaluation and Grading Plans

EVALUATION PLAN

The student's achievement of the stated objectives for the course will be evaluated by means of a point system according to the following prescription:

1. Laboratory and problem solving skills will be measured by the completion of and by the level of performance on experiments, problem assignments, and audio-tutorial assignments.
2. Knowledge of chemical concepts, principles, vocabulary, and scientific processes and an ability to apply these to specific examples will be measured by the student's level of performance on the following: Problem assignments, experimental reports, audio-tutorial assignments, quizzes, unit examinations, a final examination, and essays.
3. Attitudes and knowledge of the relevance, societal implications and aesthetic qualities of chemistry will be measured by the student's level of performance on examinations, small group participation, and essays.
4. Ability to think critically and creatively will be measured by the student's performance in laboratory exercises, projects, and on essay writing assignments.

GRADING PLAN:

A total of 1000 points for this course will be distributed in the following manner:

A.	Examinations	350 points
B.	Final Examination, Comprehensive	150 points
C.	Laboratory Activities, Projects	250 points
D.	Homework Problems and Audio-Tutorial Assignments	150 points
E.	Special Reading and Writing Assignments	100 points

GRADING:

A	88	-	100%
B	75	-	87%
C	57	-	74%
D	50	-	56%
F	0	-	49%

6. Course Policies

State course policies, such as attendance, fees, materials, expectations regarding such activities as field trips, practicum, projects, and the like.

Regular attendance is expected, and any work missed due to absence will have to be made up. Late work turned in within one week of its due date will be accepted on a full-credit basis; beyond one week late, no credit will be granted.

Laboratory glassware and equipment broken or lost during the course will be replaced at the student's expense.

7. Supplement to Course Outline - Suggested Lab Activities

   1. Discussion of and practice in basic Lab Techniques and Lab Safety.
   2. An Exercise in the Scientific Method - application of the method to discover the significance of organic functional groups for chemical reactivity.
   3. Chemical Synthesis: Preparation of Oil of Wintergreen.
   4. Implications of Chemistry: Reading, audio-tapes, and discussions regarding Ethical Issues Related to Chemistry.
   5. Aesthetics of Chemistry:
      1. Preparation of Cosmetics
      2. Dyes and Dyeing
   6. Synthetic and Creative Thinking: Assorted synthesis and other chemical problems to be solved (on paper) by individual and group efforts.
   7. Chemical Analysis and Nutrition: "Duplicate Meal Analysis"

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Physical Science 25LS
General College Chemistry

Course Author(s): Angel Juarez, Mitch Schweickert

For full and part-time physical science instructors.

1. CATALOG DESCRIPTION

Title of Course:	General College Chemistry
Course Number:	Physical Science 25LS
Unit Value:	5 units
Mode of Instruction:	2 hours lecture, 6 hours laboratory, 2 hours audiotutorial study

Brief Description of the Course:

An exploration of the basic phenomena of chemical processes in terms of fundamental physical concepts, principles, and laws. An intradisciplinary approach will be used to develop an understanding of the structure and states of matter, and dynamics, equilibrium, and energetics of matter transformations. The creative process of scientific inquiry, the aesthetics of science and the limitation and implications of scientific knowledge will be emphasized. Throughout the course, skills in critical thinking, problem-solving, and effective learning will be developed. This is the first semester of a year course in general college chemistry.

Articulation Statement:

L.M.C. General Education
C.S.U.C. Transfer

2. OVERVIEW and RATIONALE

Overview

The content and level of instruction of this course is at a more sophisticated and intermediate level than that of an introductory chemistry course. This course will provide an integrated introduction to the fundamental concepts of chemistry.

The intent of this course is to develop an appreciation for the creative and dynamic processes of scientific inquiry, to present the elementary theories and concepts concerning atomic and molecular structures of matter and to emphasize them as the achievements of creative and inspired individuals, to nurture an ability and instill confidence for problem-solving and decision-making, to elucidate the unifying concepts which underlie the structure of all chemical transformational processes, and to foster an awareness of the interrelationship of chemical processes and one's environment.

In general, the first unit will introduce the scientific method of inquiry pointing out its progressive nature and its limitations. The second, third and fourth units will look at the perception, representation, and classification of matter from a macroscopic and a microscopic point of view. The fifth unit deals with the energy and dynamics of chemical transformations. The sixth unit explores how the concepts and principles presented in the proceeding units impact upon the four elements of the Greeks: air, water, earth and fire or, in contemporary terms, atmosphere, water, land, and energy.

Upon completion of this course, the student should be able to demonstrate, successfully, a knowledge of a generalized method for problem-solving and an ability to apply this method to qualitative and quantitative problems, an understanding of the role chemistry plays in her/his personal life and the world, an ability to correlate and interpret macroscopic behavior of matter in terms of the microscopic and theoretical structure of matter, a knowledge of the chemical concepts and principles which underlie the empirical nature of chemical processes and an ability to apply these concepts and principles to make predictions regarding the stoichiometric, basic energetic and equilibria aspects of chemical reactions, a knowledge of the fundamental concepts and principles which underlie the structure of the chemical transformation process and an ability to apply these fundamental concepts and principles to represent, classify, and interpret chemical reactions, and a knowledge of both the kinetic-molecular theory of matter and the quantum mechanical theory of matter and the ability to apply both of these theories to predict some of the characteristics of matter.

Rationale

The inclusion of this course as a member of the general education family of courses is most apt given the pervassiveness of the consequences of the applications of the principles common to the physical sciences: astronomy, chemistry, geology, physics, etc. This course will introduce the student to these principles and help him/her relate them to the broader perspectives of a world view.

The process of scientific inquiry which is presented, modeled, exemplified, and imparted to the student as a general methodology for problem-solving is most appropriate as a tool for dealing with and understanding the problems that beset the world today. The student is made aware of the fact that, like any other tool, the scientific method's success in solving and/or resolving a given problem is dependent upon the creativity of its user.

Knowledge of the principles governing matter and energy interactions is most appropriate for some one trying to understand the interrelatedness of global problems and the consequences that may accompany a given solution. The intricacies of today's technological society require that everyone be familiar not with the minute details of science but with the commonalities of the sciences and their unifying methodologies.

The underlying intent of this course is to infuse the student, through various reading and writing assignments, with an understanding of chemistry as it relates to his/her life. An understanding of chemistry not as some mystical, intellectual endeavor, but as a tool which is being constantly used to shape his/her world, and that the responsibility of how this tool is used rests not only with the chemist but with everyone.

The student would be made to realize that science is not immune to the pressures from other fields of human endeavor but that quite often it is directly spurred on by the demands from these other areas. Through this course, the student will also realize that even though the field of scientific endeavor is both acultural and asexual, it, like any other field, does reflect the prevailing prejudices of society.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Introduction to the Scientific Method

  A. Progressive nature of scientific inquiry

  B. The scientific method of inquiry

    1. Observation, perception, objective and accurate description
    2. Classification
    3. Regularity formulation
    4. Model construction: theory and prediction
    5. Experimentation

  C. Limitations of the scientific method

    1. Science as a tool
    2. Ethical implications of scientific knowledge

II. Macroscopic Nature of Matter

  A. Chemistry as a science

  B. Measurement of matter

    1. Systems of measurement
    2. Uncertainty in measurement
    3. Dimensional analysis - a problem-solving approach

  C. Classification of Matter

    1. States
    2. Pure substances
    3. Mixtures
    4. Atoms, molecules and ions

  D. Naming Inorganic Compounds

  E. Transformation of Matter

    1. Qualitative - chemical equations, reactions
    2. Quantitative - stoichiometry

III. Microscopic Nature of Matter

  A. Electronic Structure of the Atom

    1. Nuclear Model
    2. Radiant energy and quantum theory
    3. Bohr model
    4. Quantum - mechanical model

  B. Electronic Configuration of many Electron Atom

  C. Periodicity and Electronic Configuration - Periodic Table

3.1 Course Content Goal, continued

D. Chemical Bonding

E. Molecular Geometry

1. Valence-Shell Electron - Pair Repulsion Model (VSEPR)
2. Molecular Orbital Model

IV. States of Matter

A. Gaseous

1. Characteristics
2. Gas Laws
3. Kinetic-molecular theory of gases

B. Liquid and Solid

1. Characteristics
    a. Physical properties
    b. Structure
2. Kinetic-molecular theory
3. Intermolecular Forces

V. Dynamics and Energy of Matter Transformations

A. Chemical Equilibrium

B. Rates of Chemical Reactions

C. Thermodynamics of Chemical Reactions

1. Energy of reaction, H
2. Free Energy (G), Entrophy (S), Equilibrium

VI. Impact of Chemistry

A. Atmosphere

1. Ozone layer distruption
2. Green-house effect
3. Smog

B. Water

1. Heavy metals
2. Organic substances, pesticides
3. Detergents

C. Land

1. Fertilizers
2. Herbicides

D. Energy

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
To convey the major theme threading and interrelating the disciplines comprising the physical sciences which is the continual search for order through the discovery of universal laws governing the interaction of matter and energy and their transformation by presenting the following concepts and principles: A. Concept: Order 1. principle of regularity 2. principle of causality B. Concept: Scientific Laws and Models 1. principle of universality 2. principle of predictability	Upon completion of this course the student is expected to successfully demonstrate the following:		
	A.1 An ability to apply fundamental concepts and principles to represent, classify and interpret chemical reactions. An ability to perceive regularities in chemical behavior, chemical transformational processes, and atomic and molecular structure.	A.1 I. B II. E III. C	A.1 Lecture/Discussion Laboratory exercises, film.
	A.2 An ability to correlate and interpret the macroscopic behavior of matter in terms of the microscopic and theoretical structure of matter.	A.2 III. C, E	A.2 Lecture/Discussion
	B.1 A knowledge of the Kinetic-Molecular Theory of Matter and the Quantum-Mechanical Theory of Matter.	B.1 IV. A. 3 IV. B. 1	B.1 Lecture/Discussion, laboratory exercises

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
	B.2 An ability to use the Kinetic-Molecular and Quantum-Mechanical theories of matter to predict the characteristics of the chemical families and some of the compounds of these chemical families.	B.2 III. E. IV. A 2	Lecture/Discussion Laboratory exercises
C. Concept: Matter/Energy Interactions:	C.1 An understanding of the concepts and principles chemical bonding, and inter-molecular forces.	C.1 III. D	Lecture/Discussion Laboratory exercises
	C.2 A knowledge of the structure of the atom	C.2 III. A, B	Lecture/Discussion
D. Concept: Matter and Energy Transformations Evolution 1. principles of Conservation (mass energy, etc.)	D.1 An understanding of the principles of mass and energy conservation and the ability to apply them to chemical transformation.	D.1 II. E V. C.1 VI. A, D	Lecture/Discussion Laboratory exercises

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
2. principle of Competing Tendencies (stability disorder)	D.2 An understanding of the concepts of Free Energy and Entropy, and their interrelationship.	D.2 V. C 2	Lecture/Discussion
3. principles of Kinetics (time scale continuum)	D.3 An understanding of the principles which govern the time-element of chemical reactions.	D.3 V. B	Lecture/Discussion Laboratory exercises
4. principles of Equilibrium States	D.4 An understanding of the principle of equilibrium in chemical reactions. The ability to apply the principle of equilibrium quantitatively to chemical systems.	D.4 V. A V. C 2	Lecture/Discussion Laboratory exercises
5. 1st and 2nd Laws of Thermodynamics.	D.5 An understanding and appreciation of the 1st and 2nd Laws of Thermodynamics.	D.5 V. C 1	Lecture/Discussion Laboratory exercises

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
	The student should be able to successfully demonstrate:		
A. To develop an appreciation for the creative and dynamic process of scientific inquiry.	A.1 An understanding of the process of scientific inquiry.	A. I. A & B	Lecture/Discussion Laboratory exercises
B. To install confidence for problem-solving and decision-making.	B.1 The ability to apply the scientific method of inquiry to a given problem.	B. I. C II. B 3 II. E 2	Lecture/Discussion Reading-writing assignments, written laboratory reports, lab exercises
	B.2 A knowledge of a generalized method for problem-solving and an ability to apply this method to qualitative and quantitative problems.		

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
To develop an awareness of the elegance of the models and patterns presented	1. To describe the two significant models within physical sciences: a) Kinetic-Molecular Theory a) Theory on Atomic and Molecular structure. To explain the perceived beauty of these theories. 2. To be able to describe the significance and elegance of the periodic table of elements.	III. A. E. C. IV. A. 3 B. 3	Discussion, writing assignments, laboratory exercises.

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
A. To provide a perspective of the far reaching consequence of the knowledge and the understanding of the principles that govern the behavior of matter.	A. To evaluate a given example as to the possible consequences for both the present and the future.	I. C VI. A-D	Discussion of illustrative examples. Written reports on topic of choice illustrating the "use" or "misuse" of knowledge.
B. To convey an awareness of the intrinsic value of knowledge and the moral obligation of those in pursuit of knowledge.	B. To illustrate and/or indicate the potential for "use" or "misuse" of a given discovery.		Audio tapes and discussion centering on the ethical implications of "new" discoveries. (Tapes from "Man and Molecules" series

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
A. To develop an awareness of the value of reading and writing as communication skills.	A. To write appropriate entries in a laboratory notebook. To critically read an article and write a summary indicating the major and minor premises.	Material from throughout the course as appropriate. II. A-D	Use of a "learning-log." Reading of articles in addition to text reading, in-class exercises in which a student rewrites a passage from the text which is then discussed.
B. To foster a positive attitude toward reading and writing.	B. To rewrite an article or passage in non-technical terms.	I. C	Essay assignments in which the student is asked to critically analyze and evaluate the merits of a presentation (written articles, audio tapes, films, etc.) both from a technical and ethical perspective.
C. To evaluate each student's ability to read and write at the necessary level for this course.	C. To demonstrate during the first week the ability to read and write by answering questions from an assigned reading.	I.	
D. To inform students of tutorial support system for improving reading and writing skills.	D. To know the procedure by which tutorial assistance with reading and writing may be obtained.		"Scientific Maverick" reports in which the student is asked to analyze, and critically evaluate why the presentation of a particular concept by an individual would have labeled (identified) him/her as a "maverick." Formal essays will be graded with attention given to: content, structure, and mechanics (with decreasing emphasis, respectively.)

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
A. To present a generalized method for problem-solving and decision-making.	Demonstrate the ability to apply the generalized method of problem-solving to specific examples.	Material from throughout the course.	Lecture/Discussion Laboratory exercises, student practice with methods.
To illustrate the logic and power of the scientific method of inquiry.	Demonstrate the ability to apply and identify the logic of the method of scientific inquiry.	II. B. & E. I. B.	Handout of problems which require the use of various thinking processes for their solution.
To present alternatives to "traditional" problem solving approaches.	Identify a causal relationship(s) between a series of events so as to project (predict) a likely outcome.	I. B.	Critical evaluation of information from audio tapes and readings so as to arrive at an ethical judgement.

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
A. To illustrate the importance of creativity to the scientific process.	To help the student to gain an appreciation and a "feeling" for the creative process.	Material from throughout the course. III. A. IV. A.	Discussion of selected cases, illustrating the creativity of an individual. Written responses to "What if..." questions.
B. To present through case studies the ingenuity, insight and interdependence of thought needed for the formulation of some of the basic scientific concepts.	Be able to propose possible alternative approaches, explanations, solutions, etc., for selected cases.	III. A. - E.	Student project requiring the application of class subject matter (both concepts and laboratory equipment) in a "novel" way.
C. To present with examples of problems that give and/or provide situations which allow the student to recognize conceptual blocks to solving problems	Be able to discuss the role of creative thinking and intuition in the development of "new" knowledge.	II. B. & E.	

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
To impart a sense of the intrinsic aculturalness, non-ethnicity, etc., of science.	List several examples of contributions to chemistry by an "atypical" person(s), group(s) of people.	Material from throughout the course. III. A & C	Lecture/Discussion of contribution of selected people(s). "Scientific Maverick" reports. See explanation under Reading and Writing Criterion.
To illustrate how the "historical setting" of the birth of modern science, chemistry in particular, contributed the present stereotypes.	Comment of the change or lack of change in the stereotypical image of a scientist.	V. A - C	Discussion of the development of chemistry as a "western" science centered predominantly in Europe.
To infuse an appreciation for the value of diversity to scientific thought.	List several examples of instances in which the prevailing paradigm hindered the acceptance of "new" knowledge.	II. C III. D IV. A	Discussion of Phlogiston theory and the difficulty with which it was abandoned.
To impart an understanding of how prevailing paradigms can hinder and/or prevent the acceptance of "new" knowledge or "new" individuals.			

OTHER:

3.3 Other Goals and Objectives

	GOALS	OBJECTIVES
A.	To develop skills and introduce appropriate laboratory methods, procedures and measurement techniques necessary for the performance of experimental investigations.	To demonstrate an understanding of and proficiency with appropriate experimental procedures and techniques within the laboratory program.

4. Texts and Other Instructional Materials

Required Textbook:

A. Textbook: Brown and LeMay, Jr., Chemistry, the Central Science, (required)

B. Selected Laboratory Exercises from: Willard Grant Press, Publishers

C. Selected slide-audio tape programs

D. Selected CIA programs

E. Selected articles from a variety of sources

F. Selected films

5. Evaluation and Grading Plans

EVALUATION PLAN

The student's achievement of the objectives identified for the course will be evaluated according to a point system as follows:

1. Laboratory and problem-solving skills will be assessed by the completion of and by the level of performance on experiments, problem assignments, and audiotutorial assignments.

2. Knowledge of chemical concepts, principles, vocabulary, and an ability to apply these to specific examples will be assessed by the student's level of performance on the following:

    a. problem assignments
    b. experimental reports
    c. audiotutorial assignments
    d. quizzes
    e. unit examinations
    f. final examination

3. Attitudes and the knowledge of the relevance, societal implications, and world perspectives of science, chemistry in particular, will be measured by the student's level of performance on written assignments, participation in group discussions, individual interactions between the student and instructor.

4. The total point distribution will be as follows:

a.	Unit exams and quizzes	35%
b.	Final examination	15%
c.	Laboratory, experiments, reports, quizzes and exams	20%
d.	Problem and audiotutorial assignments	15%
e.	Written assignments, group participation	15%

GRADING PLAN:

The grade evaluation of the student's performance for the course will be established by a cumulative point system and hence no letter grade breakdown will be indicated after individual performances. The student is encouraged, however, to strive to continuously attain as high a point percentage as possible above the minimally acceptable 50% in all phases of his/her work.

The letter grade evaluation of the student's performance for the course will be determined in accordance to the following scale:

100% - 88% = A

87% - 75% = B

74% - 57% = C

56% - 50% = D

below 50% = F

6. Course Policies

Regular attendance is encouraged. Worked missed due to absence is expected to be made up within one week of the final due date. Laboratory experiments must be made up within one week of last scheduled work period. Late work turned in within the stated times for completion will be accepted on a full credit basis. All other late work will not be accepted for credit.

The complimentary nature of the instructional activities was designed to insure some degree of success for the student who elects to work in earnest in all phases of the instructional program.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Physical Science 35LS

General College Physics

Course Author(s): Dave Nakaji

For full and part-time physical science instructors.

1. CATALOG DESCRIPTION

Title of Course:	General College Physics
Course Number:	Physical Science 35LS
Unit Value:	4 units
Mode of Instruction:	3 hours lecture/3 hours lab and problem-solving 1 hour audiotutorial

Brief Description of the Course:

An integrated study of the basic concepts, principles, and laws underlying physical phenomena and processes. An intradisciplinary approach will be taken in the portrayal of the nature, the aesthetics, and the relevance of science. Energy will be the unifying theme in treating mechanics, thermodynamics, and nuclear physics. Emphasis will be placed on the creative process of scientific inquiry. Throughout the course, skills in critical thinking, problem-solving, and effective learning will be developed. This is the first semester of a year course in general college physics.

Articulation Statement:

2. OVERVIEW and RATIONALE

Overview

One of the major goals of this course is to not only foster a legitimate understanding of the concepts and scope of physics but to engender within the student a genuine appreciation of the relevance of physics to the individual and to society. The student should leave the course with a reasonably in-depth knowledge of the role, impact and methodology of science, classical mechanics (which provides the foundation for all physics), heat and thermodynamics, nuclear physics, energy (as both a concept and a crisis) and greater skill in problem solving as it relates to the sciences and, hopefully, to other areas. The discovery method will be implemented to the fullest, most appropriate extent. An historical, evolutionary approach will be taken whenever possible to demonstrate how scientific knowledge evolves and how it impacts on culture. Certain "inter" as well as "intra" disciplinary aspects of the science will also be dealt with.

The course is launched by the content outlined in Unit III with a basic introduction to the fundamental units and quantities to be used. Motion is then the first and most easily manageable area of study since a wealth of previous physical experience can be drawn upon by the student. After describing motion, the question of the source or cause of motion is addressed via Newton's Laws of motion. The subject of gravitation subsequently becomes not only a prime example of a force which initiates motion but an arena to study the evolution and application of a model. The simplicity, elegance, and wide-reaching application of forces is further studied, catagorized and appreciated. The new concepts of work and energy are then introduced and fused together by the Conservation of Energy principle. The concept of "conservation" is further reinforced through the study of linear momentum and collisions. The description and cause of two additional differing types of motion, rotation and oscillation, are covered through the remaining sections in Unit III. Units IV and V, although seemingly different in topical matter, utilize the principles, laws and concepts presented in Unit III. In particular, the development of the model known as the Kinetic Theory of Gases is critically based on classical mechanics. In addition, conservation principles abound in the study of nuclear transformations.

It is interesting to note that as the student moves from Unit III through V, there exists a parallel procession from the macroscopic to the microscopic realm of the physical universe. Units I and II are weaved continuously into the content in the most appropriate and effective places. For example, model formulation utilizes the differing content matter of gravitation, kinetic theory and sub-atomic physics. Ethical use of science embodies material from energy, thermodynamics and nuclear transformations. Finally, problem solving, at one level, is covered in an on-going manner through the solution and discussion of physics problems. At a different level, general techniques and strategies essential to enhancement of problem solving skills are periodically discussed, discovered and implemented.

Rationale

The impact on society and culture of both the knowledge and use of the knowledge derived from physics has been and will continue to be profound. It thus seems important for those students with a moderate mathematics background to be versed in the enterprise of physics and to be able to actively and critically analyze how the generated knowledge should be used. The energy crisis and nuclear arms proliferation are prime examples of where critical and ethical examination are needed.

The laws and concepts of physics (Newton's Laws, conservation principles, gravitation, Coulomb force, etc.) lay the foundation for and weave their way through the other physical science disciplines. Physics provides the starting and ending points for understanding the phenomena described and discussed in the remaining branches of physcial science.

There exists an innate beauty, elegance and aesthetic quality to physics inherent in its simplicity, symmetry, order and profoundness which goes beyond even the sublime mathematical descriptions. In addition, the process of how the scientific knowledge unfolds is equally as pleasing to the mind's eye.

The whole endeavor of science and physics, in particular, has indeed been a creatively active process and one worthy of study by the general student. The student will be provided ample opportunity to enhance their own creativity via problem solving and open-ended and discovery oriented laboratory experiments. Higher cognitive skill development should result through translating back and forth between the English and mathematical languages while keeping in harmony with the reality of the physical world. Expressing one's interpretations and ideas, both verbally and in writing, will be important in this course, and opportunity to do such will be provided.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Discovering Science

   A. Assumptions behind the scientific endeavor (reality, causality, reproducibility, reliability of human reason)

   B. Mode of Inquiry

      1. Perception and observation process
      2. Classification and pattern formulation
      3. Model construction
      4. Evolution and dynamic nature of models
      5. Limitations of scientific process

   C. Science and Society

      1. Science and technology
      2. Science and art
      3. Ethical use of science

II. Introduction to Problem Solving

   A. General problem solving strategy

      1. Clear definition of the "problem"
      2. Assessment of known conditions, data, variables, equations, etc.
      3. Strategy: links and pathways between known and unknown, givens and objectives
      4. Mechanical solution: implementation of strategy
      5. Check for consistency, reasonableness, pathologies, usefulness for other problems.

   B. Blocks to creative problem solving (frames of reference, cultural bias)

III. Introduction to Classical Mechanics

   A. Length, mass, time spectrum

   B. Units, scalars and vectors

   C. Motion

      1. Rectilinear (one-dimensional)
      2. Planar (two-dimensional)
      3. Newton's three laws of motion

   D. Gravitation

      1. Newton's Universal Law
      2. Einstein's General Theory of Relativity
      3. Cosmology (origin of the universe)

E. Forces

1. Four fundamental forces
2. Frictional and mechanical
3. Fictitious

F. Work

G. Energy

1. Conservation of Energy
2. Energy crisis and ethical considerations

H. Linear Momentum

1. Impulse - momentum theorem
2. Conservation of linear momentum
3. Collisions (elastic and inelastic)

I. Rotation

1. Kinematics
2. Dynamics
3. Center of mass

J. Equilibrium

K. Simple Harmonic Motion

IV. Introduction to Heat and Thermodynamics

A. Temperature and Heat

B. Thermal Properties of Matter

C. Kinetic Theory of Gases

D. Energy Transformations involving heat

E. Heat transfer

F. Laws of Thermodynamics

1. First Law: Conservation of Energy
2. Second Law
   a. heat engines
   b. entropy
   c. relation to energy

V. Introduction to Nuclear Physics

A. Nuclear particles

B. Nuclear structure

C. Nuclear transformations

1. Radioactivity
2. Nuclear reactions
3. Nuclear energy
4. Nuclear arms

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
The course will teach the following concepts:			
1. There exists a basic underlying order to the way the physical universe operates, and the enterprise of physics is to extract, conceptualize and quantify that order.	1. To give a detailed description of a law from physics that exemplifies order and regularity in the universe.	All except Unit II	Lectures, laboratory and AT assignments. Reading in Harrington.
2. Physical events do not happen without some cause and the laws of physics provide an ordered link between cause and effect, both on the microscopic and macroscopic scale.	2. To give two examples of a law from physics describing a cause and effect relationship and examples of how this relationship works on a microscopic and macroscopic level.	All except Unit II	Lecture, lab, homework assignments. Reading in texts.
3. Science is the process of extracting those laws by which the universe is run and formulating models which use these laws.	3. To give an account of the evolution of a specific model and its present limits and range of applicability.	Unit I, III. D. IV. C., V. B.	Lecture, lab assignments. Reading in Harrington.

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary of Courses

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
4. The prime activity of physics is involved with studying and modeling the interaction of matter and their attendant transformations.	4. To quantitatively solve a variety of intradisciplinary problems dealing with matter and energy using the laws of physics.	Unit III, IV, V.	Lecture, lab, AT and homework assignments. Reading in both texts.
5. The laws of physics explain phenomena on both the macroscopic and microscopic scale and are extensively used in all other physical science disciplines.	5. To give one example from chemistry, astronomy and geology of a law from physics that is used within that discipline.	All except II.	Lecture, Lab, AT and homework assignments. Slide presentation: "Black Holes"

OTHER:

3.2 Criteria Related Goals: Criterion: Mode of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. The course will teach the scientific process, its range of applicability, limitations and successes.	1a. To list, define and illustrate the various stages in the scientific process.	I. B.	Lecture, Lab. Reading in Harrington
	1b. To demonstrate skill in actually utilizing the scientific process in formulating his/her own model of various phenomena.	I. A, B	Lab and homework assignments. "Black Box" experiment
	1c. To display understanding and appreciation of the fact that continual generation of new scientific knowledge leads to even more questions, this expanding both our ignorance and understanding.	I. B, C	Lecture, AT and homework assignments. Tape: "Key to the Universe"
2. The course will teach a very basic problem solving strategy and simultaneously allow students to generate and discover a strategy that best works for them.	2a. To both formulate and utilize a generalized problem solving strategy.	Unit II.	Lab, lecture, homework assignments. Handout from Polya. Reading in Giancoli.
	2b. To demonstrate a greater facility for solving a variety of problems.	All except Unit I	Lecture, AT and homework assignments. Material from Adams and Gardner.

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. The course will demonstrate the ability of physics (and science) to condense the description of nature to a remarkably small number of widely applicable laws.	1a. To discuss with examples the aesthetic nature (simplicity, range of applicability, etc.) of the laws of physics. 1b. To discuss the concepts of symmetry and invariance and their importance to the discipline of physics.	I. A, B, III., IV., V	Lecture, Lab, AT and homework assignments. Readings from Gardner, Baker and Wechsler.
2. The course will demonstrate the elegant simplicity, beauty and consistency of the mathematical language used to describe the laws of physics.	2a. To reproduce any elegant derivation (as deemed by the student) of a physical law or principle. 2b. To demonstrate creative and varied approaches to problem solving using the language and logic of mathematics.	All except Unit I.	Lecture, AT and homework assignments. Reading from Giancoli
3. The course will demonstrate that knowledge from different areas is integrated and interdependent.	3a. To discuss the differences, similarities and interrelationship between art and science. 3b. To reconstruct the relationship between physics and the other physical science disciplines.	I. C, III., IV., V.	Lecture, Lab, AT and homework assignments. Reading from Hauptman, Shapiro and Bronowski. Slide presentations on "Art and Science" and "Black Holes"

OTHER:

3.2 **Criteria Related Goals: Criterion:** Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
The course intends to demonstrate that ethical responsibilities go hand in hand with the generation of knowledge, and that although knowledge is intrinsically neutral, how to use it is not.	To give examples of how some of the generated scientific knowledge has been used and misused.	I. C	Lecture Readings from Dyson. Tape by Owen Chamberlain
	To discuss the relationship between technology and science.	I. C.	Lecture, AT assignments. Reading from National Academy of Sciences.
	To take an ethical position on various ventures in science (e.g., nuclear energy, nuclear arms)	I. C, III. G, V. C	Lecture, homework assignments. Readings from Marion, Calder and National Academy of Sciences Tape: "Who Speaks For Earth" (Cosmos series)

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. The course intends to teach students to express in writing their perceptions, awareness and analysis of the physical reality that surrounds them.	1a. To demonstrate facility in in writing observations and conclusions along with categorizing and analyzing data.	All units	Lectures, labs, homework assignments. "Black Box" experiment
	1b. To demonstrate a reasonable level of problem solving skill by writing and formulating a generalized problem solving strategy.	II., III., IV., V	Lectures, homework assignments. In class exercises for development of problem solving strategies.
2. The course will expose the student to a variety of articles and reading assignments from different journals, magazines and books and promote both discussion and interpretive writing related to the reading.	2a. To be more familiar with scientific terminology. 2b. To be able to more effectively read, interpret and understand scientific articles as well as popular literature.	All except Unit II.	Lecture, AT and homework assignments. Readings from Dyson as well as Journals such as "The Physics Teacher," "Physics Today," "Science," etc. Reading in Harrington.
3. The course will promote reading and writing in the language of mathematics.	3a. To demonstrate skill in using, manipulating and interpreting the structure, symbolism and logic of mathematics.	II., III., IV., V.	Lecture, Lab, AT and homework assignments.

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
4a. The course will assess student abilities in reading and writing.	4a. To read, evaluate, and assess in writing two articles, one of a scientific nature and the other non-technical.	III., IV., or V.	Handouts
4b. The course will provide direction and opportunity for students to improve their reading and writing skills by referral to an appropriate Language Arts tutor with subsequent and continual working together in concert by the instructor, tutor and student to enhance student skills as appropriate to the course.	4b. To seek and gain specific skill in reading and writing, if necessary.	None	Language Arts tutor

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. The course will provide exposure to a generalized problem solving strategy.	1. To demonstrate skill and adeptness in attacking and solving a variety of problems.	II., III., IV., V.	Lecture, homework assignments, in-class exercises.
2. The course will promote opportunity to use and fuse together both the English and mathematical languages into sensible and coherent statements of physical reality.	2. To demonstrate ability to use, manipulate, understand and conceptualize the abstract symbols and logic of the mathematical description of nature. As was stated in the rationale, higher levels of thinking should result from having to translate between the English and mathematical languages while keeping synchronized with physical reality.	III., IV., V.	Lecture, Lab, AT and homework assingments.
3. The course will provide opportunity for critical analysis of ethical issues pertaining to science.	3. To demonstrate proficiency and insight in analyzing ethical dilemmas, choosing options and defending choices.	I. C, III. G, IV. F, V. C	Lecture, AT and homework assignments. Use of materials pertaining to nuclear arms and energy. Tape: "The Last Epidemic"

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
4. The course intends to teach the use and effectiveness of formulating the mental constructs known as "models".	4. To demonstrate an ability to construct models via modes of synthesis, analogous thinking, conceptualizing and intuitive reasoning.	I. B, III. C, IV. A, C, V. B.	Lecture, AT assignments. "Black Box" experiment
5. The course will provide opportunity for original development and evaluation of laboratory experiments.	5a. To write an original laboratory experiment that is both feasible to perform and accurate in its use of physical principles. 5b. To successfully perform, evaluate and critique another students' experiment.	III. C, IV. D.	Lab assignments

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. The course will expose the student to various case studies of quantum leaps of intuition and insight which led to revolutionary theories.	1a. To gain insight into the creative process. 1b. To discuss at least one case of the creative process at work in physics.	I. B, III. D. V. B, III. E.	Lectures, AT assignments. Readings from Bronowski. Handout on creative process. Tapes: "The Shores of the Cosmic Ocean" and "Einstein's Universe"
2. The course will help students develop their innate creative potential.	2a. To experience viewing situations and phenomena from different perspectives.	All units	Lectures, AT and Lab assignments. In-class exercises on problem solving.
	2b. To design, write and run his/her own experiments.	III. C. IV. D.	Laboratory assignments.
	2c. To experience enhanced problem solving skills by studying some conceptual roadblocks to creativity.	II. C.	Lectures, Lab, homework assignments. In-class exercises in creative problem solving.
3. The course will expose the student to the similarities inherent in the creative process for scientists and artists.	3. To discuss the similarities between the creative process in science and art.	I. C, II.	Lectures, homework assignments. Material from Bronowski, Shapiro and Hauptman.

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, experiences, and persuasions that have an Impact on Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. The course will expore the cosmopolitan nature of the enterprise of physics.	1a. To understand and appreciate the fact that knowledge in physics is gained through the collective work of many physicists working in different cultures and societies.	III. D. V.	Lectures, AT assignments. Tape: "Key to the Universe" Reading from Dyson.
	1b. To cite an example of the acultural phenomenon.		
2. The course will link the culture-reflecting perspective of art with the perspective of science.	2a. To understand and appreciate some of the parallel tracks that scientific and artistic enterprises run on.	I. C.	Lectures. Slide presentation on art. Handouts from Hauptman and Shapiro. Reading from Bronowski.
	2b. To discuss the relationship between art and science.		
3. The course will provide examples where discrimination due to religion, race or sex, has placed obstacles in the pathway of scientific progress.	3. To discuss how discrimination and the cultural climate of the times has impacted on the life of at least one scientist.	I. B. III. D.	Lectures, AT assignments. Tape: "Starry Messenger" (Ascent of Man)
4. The course will study the lives of a diverse cross-section of contemporary physicists.	4. To discuss the differing lifestyles, attitudes and problems indigenous to a variety of contemporary physicists.	I. C.	Lectures. Selected readings from books and magazines.

OTHER:

4. Texts and Other Instructional Materials

Required Textbook:

Physics, Giancoli, Prentice-Hall

Discovering Science, Harrington, Houghton-Mifflin, 1981

Audiovisual Materials:

1. "Ascent of Man" series by Jacob Bronowski
2. "Cosmos" series by Carl Sagan
3. "Powers of Ten" by Philip Morrison
4. "Key to the Universe" by Nigel Calder
5. "Olympics of the Mind" by Bill Moyer
6. "Einstein's Universe" by Nigel Calder
7. Audiotutorial packages developed by instructor
8. "The Last Epidemic" by Physicians for Social Responsibility

Laboratory Assignments:

All lab assignments have been developed by the instructor into individual handouts.

Reading Assignments:

These assignments may include material from the following sources:

Modern Physics and Antiphysics, Adolph Baker

The Character of Physical Law, Richard Feynman

Science and Human Values, Jacob Bronowski

Environmental Ethics, Albert J. Fritsch

Conceptual Blockbusting, James L. Adams

How to Solve It, G. Polya

Nuclear Nightmares, Nigel Calder

The Ambidextrous Universe, Martin Gardner

The Riddle of Gravitation, Peter G. Bergmann

Creative Growth Games, Eugene Raudsepp

Aha? Insight, Martin Gardner

4. Texts and Other Instructional Materials, continued

The Arts and the Sciences. A New Synthesis, Irving Hauptman

Disciplinary Interdependencies in Creativity and Cultural Progress, Charles Shapiro

Einstein for Beginners, Joseph Schwartz

The Creative Process, Brewster Ghiselin

Energy in Transition 1985-2010, National Academy of Sciences

Conceptual Physics, Paul Hewitt

Science and Technology, National Academy of Sciences

Energy in Perspective, Jerry Marion

Energy, National Geographic

Disturbing the Universe, Freeman Dyson

The Visionary Eye, Jacob Bronowski

"Physics Today"

"The Physics Teacher"

"Scientific American"

"Science"

"Scientific American Reprints"

5. Evaluation and Grading Plans

EVALUATION PLAN

1. Knowledge and application of physics concepts, principles, and scientific methodologies will be measured by performance on homework, lab assignments, AT assignments, quizzes, unit exams, final exam and essays.

2. Problem solving skills will be measured by performance on experiments, homework and AT assignments.

3. Attitudes and knowledge of the relevance, societal implications and aesthetic qualities will be measured by performance on exams, in-class discussion, AT assignments and essays.

4 Ability to think critically and creatively will be measured by performance on exams, lab assignments, problem sets, AT assignments and essays.

GRADING PLAN:

A total of 850 points will be distributed in the following manner:

1.	Unit Exams	400 points
2.	Final Exam (comprehensive)	200 "
3.	Laboratory Activities	100 "
4.	Homework, AT assignments, quizzes and essays	150 "

GRADING SCALE:

A = 88 - 100%

B = 75 - 87%

C = 60 - 74%

D = 50 - 59%

F = 0 - 49%

6. Course Policies

Regular attendance is encouraged and expected, and any work missed due to absence, is expected to be made up.

No make-up exams are given unless the instructor is notified in advance of the absence.

Attendance on field trips is encouraged and expected.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Physical Science 45LS

Introduction to Astronomy

Course Author(s): Kate Brooks

For full and part-time physical science instructors.

1. CATALOG DESCRIPTION

Title of Course:	Introduction to Astronomy
Course Number:	Physical Science 45LS
Unit Value:	3 units
Mode of Instruction:	3 hour lecture, 1 hour autotutorial

Brief Description of the Course:

A survey of current concepts of the universe and their historical evolution from an intradisciplinary approach. Emphasis is placed on the creative process of scientific inquiry by which current scientific understanding has been achieved, on the aesthetics of science, and on the limitations and implications of scientific knowledge. The material is presented throughout with the aid of the planetarium sky and the autotutorial method of instruction. Opportunities for the development of skills in critical thinking, problem-solving, and effective learning will be provided throughout the course.

Articulation Statement:
LMC General Education
Transfer: UC, CSUC (Gen. Ed. area B)

2. OVERVIEW and RATIONALE

Overview

Physical Science 45LS (Introduction to Astronomy) is a one semester course whose major goal is to develop a familiarity with the known contents, processes and evolution of the macroscopic physical universe and with the scientific method by which such knowledge has been uncovered. The content is organized in the traditional sequence beginning with the motions of the Earth and its closest neighbors and the naked-eye appearance of the universe as seen from Earth and moving outward in space to a consideration of planets and the solar system, stars, galaxies and finally the universe as a whole. Paralleling this spatial sequence, the course will also present an historical evolution moving forward in time from the geocentric view and mythological approaches of ancient cultures through the Copernican revolution up to the most current cosmological models of the universe. Key historical figures and the tools and methods by which they uncovered knowledge are stressed. Special attention is paid to the mode of scientific inquiry by which observation, classification and the perception of regularities have led to the discovery of scientific laws and the construction of models and theories.

The topics in the course are presented largely through lectures, media presentations and readings in a text and supplementary articles and books. The mode of inquiry is conveyed partly through lectures and reading but also by means of direct participation on the part of the learner. The planetarium facility is used extensively, not only to familiarize the learner with the appearance and motion of celestial objects in the night sky but also to allow participation in the scientific process of collection and interpretation of data. Further direct experience occurs through outdoor observing exercises requiring collection and interpretation of data.

While the main emphasis of the course is the current concepts and the process of inquiry by which they have evolved, attention is also given to constellations, older cultures' myths and beliefs about the sky, the value of the space effort to society and ethical and societal implications of astronomical knowledge. Philosophical considerations which arise from theories of the origin and evolution of the universe and the limitations of science in answering some of the ultimate questions are also explored. The learner is encouraged to think critically and to clarify his or her own ideas, values and feelings about the universe, the place of mankind within it and its relevance to the meaning of our lives.

Rationale

Introduction to Astronomy is conceived and taught as a general education course and thus incorporates in a central way the major themes, concepts and mode of inquiry common to all disciplines within its intradisciplinary family - physics, chemistry and general physical science. It seeks to demonstrate that the science of astronomy is a continual search for order through discovering universal laws governing the interaction of matter and energy and their transformation. From the earliest perceptions of the regular cycles of the celestial objects to the modern perception of the law of the expanding universe, the course stresses the order that has been found to exist in the universe and expressed in scientific laws. It demonstrates how the macroscopic behavior and evolution of the largest units of matter in the universe are governed by the interaction of matter and energy and the action of the fundamental forces on elementary particles. The four major stages in the scientific process are emphasized with each topic studied, both through lecture and participatory modes of instruction. There is a continual attempt to foster an appreciation of both the beauty and order in the universe and also the painstaking work and creative accomplishments of those men and women of different cultures who have brought astronomical knowledge to mankind as a whole.

Reading and writing skills and the skill of effective thinking are enhanced respectively through reading and writing assignments and exercises which call for the manipulation and interpretation of data and tests which stress the understanding of concepts through their application to new situations.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Orientation to the Sky

A. The Importance of Careful Observation

B. Regular Star Patterns: The Constellations

C. Regular Diurnal Motion of the Celestial Sphere

D. Classifying the Constellations:

1. Circumpolar
2. Equatorial
3. Zodiacal

E. Models which explain the diurnal motion

1. the ancient geocentric view
2. the Copernican heliocentric view
3. the importance of proof

F. Methods of measuring position on the celestial sphere

1. Horizon coordinate systems
2. Equatorial coordinate system

G. The value and meaning of mythology of ancient cultures about the sky

II. The Observation and Interpretation of Regular Cycles of the Earth, Sun and Moon

A. Appreciation of the order which the regular, predictable cycles of celestial objects have brought to life on the Earth

B. How these cycles are observed from the Earth and explained in both the geocentric and heliocentric models

1. day and night and the rotation of the Earth
2. the motion of the sun through the zodiac and the orbit of the Earth
3. the changing daily path of the sun in Earth's sky and the Earth's axial tilt; solar energy as a societal issue
4. the phases of the moon and its motion through the zodiac
5. the cycle of eclipses
6. the precessional cycle of the Earth

C. The significance of understanding what frame of reference one is viewing from (both in scientific observation and human relationships)

3.1 Course Content Goal, continued

D. The distinction between astronomy and astrology

E. The possible effects of astronomical cycles on human beings and other living organisms on Earth

F. The accomplishments of ancient civilizations in understanding and measuring astronomical cycles

III. The Birth of Modern Astronomy: Understanding the Mechanics of the Solar System and the Development of the Telescope.

A. Observed appearance and regular motions of the planets

B. Historical development from geocentric to heliocentric theory

1. Ptolemy and the concept of epicycles
2. Copernicus - the greater beauty and simplicity of the heliocentric theory
3. Galileo
4. Tycho Brahe - the painstaking naked-eye observer
5. Kepler and his three laws of planetary motion
6. Isaac Newton and the law of universal gravitation

C. Clear-cut demonstration of the four stages in the scientific process in the work of Brahe, Kepler and Newton

D. The development of the refracting and reflecting telescopes by Galileo and Newton, respectively

E. Appreciation of the creativity of those who advanced new and revolutionary models

IV. The Solar System and the Question of Life on Other Worlds

A. The physical characteristics of planets, satellites, comets and meteoroids

B. Classification of terrestrial vs. Jovian planets.

C. Conditions for the development or continuance of life on a planet and for the presence of atmospheres

D. Models of the formation of the solar system which explain the regularities of planetary motion and physical characteristics

E. The value to society of studying the other planets

F. Societal decisions regarding the uses of space

1. Building space colonies
2. Sending further space missions, manned and unmanned, to study planets
3. Terraforming planets to make them habitable
4. Searching for extraterrestrial life and intelligence

3.1 Course Content Goal, continued

V. The Sun and Stars

- A. The nature and behavior of light
- B. Analyzing light with spectroscopes
- C. What astronomers learn about sources of light from studying their spectra
- D. The spectra of the sun and stars
- E. The surface appearance of the sun
    1. Sunspots and their possible effect on Earth
    2. Granulation and Prominences
    3. Solar radiation and Solar Wind
- F. Appreciation of the importance of the sun to Earth life
- G. The current model of how the sun produces energy
- H. Classifying stars, measuring their distance
- I. The relationship of stellar luminosity and surface temperature and its interpretation
- J. The life cycle of the sun and stars - the current model of stellar evolution
- K. Nuclear fusion as a societal issue

VI. Galaxies and the Universe

- A. The nature of the Milky Way
    1. Ancient myths
    2. Sun-centered models of the early 20th century
    3. Discovery of the true shape and dimensions of the Milky Way Galaxy and the location of the solar system within it
- B. Classification, regularity patterns and evolutionary models of galaxies
- C. The observed redshift of galaxies
- D. Hubble's law revealing the expansion of the universe
- E. Cosmological models
- F. Metaphysical explanations of creation
- G. The work of the modern astronomer
- H. Accomplishments of women astronomers
- I. The limitations of science in answering ultimate questions of the origin of the universe.

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To demonstrate the concept of order in the physical arrangement and the regularity of motion of all macroscopic objects in the universe.	1. To describe or identify the order expressed in: a. the regular cycles of the Earth, sun and moon. b. the regularities of planetary motion and physical characteristics. c. the luminosity-temperature relationship for stars. d. the physical appearance of galaxies. e. the law of the expanding universe	I. D, E II. A, B III. A IV. A, B V. 1 VI. B, C, D	Lecture with slides, films, demonstration with planetarium instrument. Reading. Construction of tables and graphing results. Review exercises, such as AT units, review questions.
2. To demonstrate that the search for the cause of astronomical phenomena is the fundamental goal of astronomers.	2. To explain why the above phenomena are thought to occur.	I. E. - II. B. III. B. 6 IV. D V. G., J. VI. B, E, F	Lectures, reading, Discussion
3. To show that the present understanding represents the best guess or "model" which can explain observed regularity patterns and predict future behavior.	3. To discuss areas of theory which are still extremely uncertain.	IV. D V. G V. J VI. E	Lecture, Discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
4. To foster an understanding of the principle that physical laws apply universally to objects in the cosmos.	4. To appreciate that the power of scientific laws lies in their universality and predictability.	III. B, 5 V. J VI. D	Lecture, reading.
5. To demonstrate that the universe and the large-scale units of matter within it are (or have been) structured and evolve by the action of fundamental forces on elementary particles.	5. To describe how gravity and the energy of objects govern motions in the solar system and how gravity and the nuclear force, together with the laws of gases, determine the structure and the life cycle of stars, galaxies and the universe.	III. A, B V. G, J VI. E	Lecture, reading, slides.
6. To demonstrate how the principles of conservation of mass/energy, stability v. disorder, kinetics, equilibrium states and the laws of thermodynamics relate to the macroscopic universe and determine how it evolves.	6a. To describe how motions in the solar system, galaxy and universe (or the continued existence of a star) are due to an equilibrium between the momentum of object (or its internal pressure) and forces acting on it.	IV. B V. G VI. E	Lecture
	6b. To explain why the universe may die a "heat" death.	VI. E	Lecture, reading.
	6c. To describe how, in transformations of astronomical objects, energy is conserved but disorder increases.	IV. B V. G J	Lecture.

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To develop an understanding of the four stages in the scientific process: a. observation b. classification c. regularity formulation d. interpretation or model construction.	1. To explain any one of the four stages in the process of scientific inquiry and identify which stage is being done if given an example or asked to perform a task.	I. A,B,C,D,E,F II. B, 1-4 III. A,C IV. A,B,D, V. G-J VI. A,3, B,C,D,E	Lectures - Record data regarding a. daily path of sun b. the position, surface features and shape of of the moon. c. positions of constellations or planets either in the planetarium or real sky. Interpret such data.
2. To develop an understanding of the tools astronomers use for stage 1 (observation)	2. To recognize, identify or diagram basic instruments and explain how and why they are used.	III. D V. A-D VI. C	Lecture. Demonstrations of optics, light spectra. Slides.
3. To demonstrate what and how astronomers learn from spectra.		II. B, 2	
4. To distinguish astronomy from astrology.	4a. To distinguish statements of an astrologer from those of an astronomer. 4b. To describe or identify the major differences between astronomy and astrology.		Lectures, in-class writing.

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1a. To foster an appreciation for the beauty, vastness and order in the universe.	1. To express in writing or orally a sense of the beauty and vastness of the universe and an understanding of the drive for simple explanations.	I. B II. B	Lectures, discussion Slides Films Planetarium Sky
1b. To foster an appreciation of the fact that astronomers search for the model or explanation which has the greatest simplicity or beauty.			
2a. To enhance the sense of how mankind has evolved out of the cosmos.	2. To express in writing or orally feelings regarding the astronomical view of man's origins and reactions to the kind of work astronomers do.	III. B, E IV. E V. C VI. C	Lectures
2b. To foster an appreciation for the intensity of concentrated, painstaking effort required to uncover astronomical knowledge.		II. D III. B-E	Media presentations (tapes with slides/music)
3. To enhance appreciation for the value of myths about the sky.	3. To describe myths about the sky. Compare those of different cultures and express views regarding their value.	I. G VI. A 1	Lectures, reading. Slides.

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To introduce the idea that astronomical cycles might affect people and other life.	1. To express views and analyze values regarding: how astronomical cycles might affect us.	II. E	Lecture, writing exercises.
2. To explore ethical issues involved in the uses of space, in gathering knowledge about the planets, and in searching for extraterrestrial life.	2. To describe methods, express one's own views and analyze one's values regarding: a. uses of space b. exploring and terra-forming planets c. building space colonies d. how creation happened e. how mankind evolved on Earth	IV. E, F	Lecture, slides Discussion, writing exercises.
3. To explore issues involved in deciding how and why creation happened and how mankind evolved on Earth.	3. To compare and contrast scientific, mythological and metaphysical approaches to understanding: a. how creation happened b. how man evolved out of the cosmos	VI. E, F I	Lecture, slides discussion Media presentations (tape with slides and music) such as planetarium show ("In the Beginning") or film "Universe"

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To require reading in a descriptive level text and supplementary books and articles.	1a. Demonstrate comprehension of text and other readings by answering questions requiring understanding of concepts. 1b. To demonstrate ability to summarize the major points of a descriptive level article or book and to express a personal opinion or reactions (i.e., write a book or article review, or a term paper.	All parts.	1. Tests - Text and supplementary reading or term paper.
2. To require homework assignments, observing exercises, in-class writing exercises and essay questions on test.	2. To demonstrate skill in writing clear interpretations of data collected, descriptions of the physical universe, concepts as to how the universe operates and has evolved, and values and feelings regarding ethical issues related to astronomy.	All parts but especially I. G II. D, E IV. E, F V. J, H VI. F, 1 (for controversial topics, values)	Written homework assignments. Written conclusions on observing assignments.

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
3. To foster free flow of ideas whether they be explanations, applications of concepts, personally devised theories about observations or personal opinions about controversial topics of societal issues in astronomy.	3. To express clearly in written or oral form one's opinion on a controversial topic.		Frequent in-class writing exercises where students express opinions on controversial topics, concoct theories, explain or apply concepts.
4a. To assess sufficiency of learner's reading and writing skills for meeting the demands of this course.	4a. To know the sufficiency of reading and writing skills for mastering tasks of this course.	Unit 1	In-class, on-the-spot summaries of written material.
b. Inform learners of tutorial support system for improving reading and writing skills.	4b. To be acquainted with procedure for seeking tutorial assistance in improving reading and writing skills.		

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To enhance skills in effective, logical thinking by giving practice in drawing correct conclusions from observed data and patterns.	1. To draw effective conclusions from astronomical data.	All parts	Class discussion, verbal and written responses to classroom questioning by instructor
2. To encourage learner to follow through an idea or personal theory to see if it would work to explain an observed phenomenon.	2. To demonstrate understanding of concepts by applying them correctly to new situations.	All parts, esp. Units 1, 11	observing and lab exercises in which practice is given on all phases of scientific mode of inquiry

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To foster an appreciation of the creativity of astronomers who have led us to new views of the universe.	1. To express an understanding of the creative aspect of model construction and the devising of theories which explain observed astronomical phenomena.	I. G II. D, E III. B, C, D, E IV. D V. G, J VI. E, G	Tests and Homework Questions Lecture.
2a. To experience the creative process in searching for theories which might explain observed phenomena.	2. To devise and express clearly in written or oral form: a. theoretical explanations for observed phenomena.		In-class participation where instructor asks students to: a. devise an explanation or theory
2b. To experience the creative process in searching for proof of widely held theories or of their own personally concocted theories.	b. proof of theories widely held to be true (i.e., the Earth rotates)		b. devise proof of the explanation c. devise proof of controversial theories.
2c. To encourage free flow of ideas in the learner's mind.	c. proof of phenomena for for which there is no clear-cut scientific evidence.		d. justify belief in nonscientific approaches to studying the cosmos (metaphysical, astrological) either orally or in writing.

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To foster an: a. appreciation of the astronomical accomplishments of ancient cultures b. mythological approaches of ancient cultures c. metaphysical explanation of the origin of the universe d. the accomplishments of women astronomers	1. To express in writing or through identification, an understanding of and an appreciation for: a. b. c. d.	I. G II. D VI. A, 1 VI. F, H, 1	Lecture, slides. Planetarium shows and presentations.

OTHER:

4. Texts and Other Instructional Materials

a. Required: Long, Charles. Discovering the Universe. San Francisco, Harper and Row, 1980

Ebbighausen, Astronomy (3rd Edition). Columbus, Ohio: Charles E. Merrill, 1976

"Star and Planet Locator" Star Chart

b. Recommended: Sagan, Carl. The Cosmic Connection (Dell Book, 1973)

c. Media Materials Available and Recommended for Instructor Use.

Astronomical slide sets from Lick and Palamar Observatories

Planetarium tape-slide presentations:

"Dramatic Scenes from the Hansen Planetarium"

"The People" (Hansen Planetarium)

"Springtime of the Universe" (Hansen Planetarium program on Stellar evolution, the sun and nuclear fusion)

"In the Beginning" (on Stellar evolution, the sun and nuclear fusion)

Hubbard Scientific Overhead Transparencies

Celestial Sphere Globes

Blackboard Optics Kit

Film: "Universe"

Cosmos videotapes (Carl Sagan)

Ascent of Man videotapes (Jacob Bronowski)

d. Books in Learning Center available for independent reading and research (for book reviews or term papers).

4. Texts and Other Instructional Materials, continued

Units I, II: Astronomical Cycles, Ancient Astronomy

Allen, Richard Henckley. Star Names: Their Lore and Meaning. New York:
Dover Publications, 1963

Aveni, Anthony. Skywatchers of Ancient Mexico. Austin, Texas: University
of Texas Press, 1980

Brown, Peter Lancaster. Megaliths, Myths and Men. New York: Taplinger
Publishing Company, 1976

Burland, Cottie. North American Indian Mythology. London: Hamlyn
Publishing Group Limited, 1965

Clark, Ella. Indian Legends of the Pacific Northwest. Berkeley,
California: University of California Press, 1953

Cornell, James. The First Stargazers. New York: Charles Scribner's
Sons, 1981

Hawkins, Gerald S. Beyond Stonehenge. San Francisco: Harper and Row, 1973

Hawkins, Gerald S. Stonehenge Decoded. New York: Dell Publishing Co.,
Inc. (A Delta Book), 1965

Hoyle, Fred. On Stonehenge. San Francisco: W.H. Freeman and Company, 1977

Jobes, Gertrude and James Jobes. Outer Space: Myths, Name Meanings,
Calendars.
New York: The Scarecrow Press, 1964

Krupp, E.C., ed. In Search of Ancient Astronomies. San Francisco:
McGraw Hill, 1978

4. Texts and Other Materials, continued

Units III, IV: The Birth of Modern Astronomy
The Nature of the Solar System
The Question of Life in the Universe

Adelman, Saul and Benjamin. *Bound for the Stars* Prentice-Hall, 1981

Andrade, E.N. da C. *Sir Isaac Newton: His Life and Work.* Garden City, New York: Doubleday & Co., Inc. (Anchor Books), 1964

Asimov, Isaac. *Mars, the Red Planet*. Lathrop, Lee and Shepard Co., 1977

Bracewell, Ronald. *The Galactic Club: Intelligent Life in Outer Space*. San Francisco: W.H. Freeman, 1975

Intro. by John C. Brandt

Comets: Readings from Scientific American. San Francisco: W.H. Freeman, 1981

Calder, Nigel. The Viking Press, 1978

Goldsmith, Donald. *The Quest for Extraterrestrial Life*.

Jonas, Doris and David Jonas. *Other Senses, Other Worlds*. New York: Stein and Day, 1976

Kaufmann, William J., III. *Planets and Moons*. S.F.: W.H. Freeman, 1979

Kopal, Zdenek. *The Solar System*. New York: Oxford University Press, 1973

MacVey, John W. *Whispers from Space*. New York: MacMillan Co., 1973

Mehling, Theodore. *Astronomy and the Origin of the Earth*. Dubuque, Iowa: Wm. C. Brown Co., 1973

Morrison, David and Jane Samz. *Voyage to Jupiter*. Washington, D.C.: NASA, 1980.

Murray, Bruce, ed. *The Planets*. W.H. Freeman, 1982

Oberg, James. *New Earths*. Stackpole Books, 1981

Richardson, Robert S. *The Star Lovers*. N.Y.: The MacMillan Co., 1967

Sagan, Carl, ed. *Communication with Extraterrestrial Life*. Cambridge, Mass.: MIT Press, 1973

Sagan, Carl. *Murmurs of Earth*. Random House, 1978

The Solar System: A Scientific American Book San Francisco: W.H. Freeman and Co., 1975

Sullivan, Walter. *We Are Not Alone*. New York: New American Library (A Signet Book), 1974

Wood, John A. *The Solar System*. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1979

4. Texts and Other Instructional Materials, continued

Units V-VI. The Life Cycle of the Sun and Stars; Galaxies and the Universe

Berendzen, Richard, Richard Hart, and Daniel Seeley. *Man Discovers the Galaxies*. New York: Science History Publications, 1976

Bok, Bart J. and Bok, Priscilla. *The Milky Way*. Cambridge, Mass: Harvard University Press, 1974

Bok, Bart, and Priscilla Bok. *The Milky Way*. Cambridge, Mass., Harvard University Press, 1981

Calder, Nigel. *Violent Universe*. New York: The Viking Press, 1969

Chaisson, Eric. *Cosmic Dawn*. Atlantic-Little, Brown, 1981

Charon, Jean. *Cosmology: Theories of the Universe*. New York: McGraw Hill, 1970

Ferris, Timothy. *The Red Limit*. William Morrow and Co., 1977

Gamon, George. *A Star Called the Sun*.

Intro. by Owen Gingerich
Cosmology + 1: Readings From Scientific American.
S.F.: W.H. Freeman, 1977

Jastrow, Robert. *God and the Astronomers*. N.Y.: Norton, 1978

Jastrow, Robert. *Red Giants and White Dwarfs*. N.Y.: Harper & Row, 1971

Jastrow, Robert. *Until the Sun Dies*. N.Y.: Norton, 1977

Kaufmann, William J. *Black Holes and Warped Spacetime*. S.F.: W.H. Freeman, 1979

Kaufman, William J. *Galaxies and Quasars*. S.F.: W.H. Freeman, 1979

Kaufman, William J., III *Relativity and Cosmology*. N.Y.: Harper & Row, 1973

Munitz, Milton, ed. *Theories of the Universe*. New York: MacMillan Publishing Co., Inc. (The Free Press), 1957

Page, Thornton and Page, Lou Williams, ed. *The Evolution of Stars: How They Form, Age, and Die*. London: MacMillan Co., 1968

Rowan-Robinson, Michael. *Cosmic Landscape: Voyages Back Along the Photon's Track*.

Shapley, Harlow. *Galaxies*. New York: Atheneum, 1967

Shipman, Harry L. *Black Holes, Quasars, and the Universe*. Palo Alto: Houghton Mifflin, 1980

Silk, Joseph. *The Big Bang: The Creation and Evolution of the Universe*. S.F.: W.H. Freeman, 1979

4. Texts and Other Materials, continued

Sullivan, Walter. Black Holes: The Edge of Space, the End of Time. Garden City, New York: Anchor Press/Doubleday, 1979

Wald, Robert M. Space, Time, and Gravity. Chicago: Unviersity of Chicago Press, 1977

Hoyle, Fred. Ten Faces of the Universe. S.F.: W.H. Freeman, 1977

Murchie, Guy. Music of the Spheres: The Material Universe from Atom to Quasar, Vol. I
The Macrocosm: Planets, Stars, Galaxies, Cosmology.
N.Y.: Dover Publications, 1967

Sagan, Carl. The Cosmic Connection: An Extraterrestrial Perspective. N.Y.: Dell Publishing Co., (A Dell Book), 1975

Sagan, Carl. Cosmos. New York: Random House, 1980

Seeds, Michael A. Horizons Wadsworth Publishing, 1981

Seeds, Michael A., Ed. Astronomy: Selected Readings. Menlo Park: Benjamin Cummings, 1980

Wagoner, R. and Donald Goldsmith. Cosmic Horizons: Understanding the Universe. S.F.: W.H. Freeman, 1982

5. Evaluation and Grading Plans

EVALUATION PLAN

Students will be evaluated on their performance on

a.	Tests, exams	40%
b.	Homework Assignments designed to develop effective thinking and understanding of scientific mode of inquiry. (Observing lab exercises)	20%
c.	Homework Assignments designed for review and mastering of concepts and factual content. (Autotutorial slide-tape units with test or study questions)	25%
d.	Independent reading and research. Book, article reviews or term paper.	10%
e.	Attendance	5%

GRADING PLAN:

Points are accumulated and grades assigned on the basis of the following scheme:

100 - 90% = A

80 - 89% = B

67 - 79% = C

50 - 66% = D

6. Course Policies

Attendance is required and earns 1/2 point per 50-minute class attended.

One or two field trips offered;

a. outside observing with school telescope at nearby site

b. telescope observing at Chabot Science Center in Oakland

2.4 Humanistic Studies

2.4.1 Art 5LS: Humanities: Visual Art

2.4.2 Music 10LS: Music Literature

2.4.3 Humanistic Studies 40LS: Philosophies of the World

2.4.4 Humanistic Studies 41LS: Critical Perspectives

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Art 5LS

Humanities: Visual Art

Course Author(s): Larry Howard, Jean Shrader, Stan Smith

For full and part-time art instructors.

1. CATALOG DESCRIPTION

Title of Course:	Humanities: Visual Art
Course Number:	Art 5LS
Unit Value:	3 units
Mode of Instruction:	3 hour lecture

Brief Description of the Course:

An intradisciplinary course with a focus on the visual arts. Specific attention is drawn to the role of the arts within a cultural context: i.e., the form of the art as a manifestation of the culture that produced it. This course will explore examples of art from Western/European culture as well as non-Western/European societies. Consideration will be given to both historic and contemporary aesthetic frameworks of selected cultures: i.e., "Western African Art Before and After Colonization." The role of the artist in various cultures will be examined to show the student the potential of the visual arts as a source of personal enrichment. The course will provide an opportunity for creative problem solving through exercises and hands-on experiences, and will teach observation and critical skills through attendance at and evaluation of contemporary exhibits and performances.

Articulation Statement:

GE Requirement for AA Degree.

2. OVERVIEW and RATIONALE

Overview

This course is designed for the general student population as an introduction to the creative process, in general, as it applies to all of the arts and to the visual arts specifically. It explores the arts of numerous cultures from the perspective of its (Art's) preponderance toward "mirroring" the values, history and attitudes of the culture that produced it.

The student will receive an elementary introduction to the structural elements of various art forms, i.e., painting, sculpture and graphics and the part these forms have played in various cultures historically, i.e., mural painting in Mexico, sculpture in West Central Africa, graphics of Japan, etc. The course also looks at contemporary art in America through slide presentations and examination of "live" art in classroom and gallery presentations. Through these examinations, the ethical implication of the "artists' vision" in a democratic society will be explored and discussed.

This course also shows the interrelatedness of all of the arts and provides an opportunity for viewing "live" performances and exhibits as well as establishing a basis for critical evaluation.

Rationale

The general student body should have an opportunity to experience multicultural art forms on a level that can be comprehended with little or no artistic background.

Students should explore, as well, how we communicate nonverbally through music, dance, drama and the visual arts. They should understand how these forms of expression convey subtle meanings, express intense emotions and how, uniquely, the arts can stir a deep response in others.

A knowledge of the arts is an important tool for understanding other cultures as well as one's own society, for, the language of art is the language of a people, a time and a place. The communication of ideas in nonverbal forms is as old as the history of the human experience, while it is an important historical tool it goes beyond to show us the aesthetic, in fact, the very spirit of the culture in which it was produced

This course introduces the student to the important themes unifying the humanities, i.e., music, drama, and the visual arts, and will provide opportunities to develop their reading, writing and thinking skills, through a combination of traditional and more novel individual and group activities.

Hence, the basic thrust of this course and the reason for its inclusion in the LMC Tier I program is to provide with the basic knowledge of the creative process and information about the role of the visual arts in a societal context, along with a dynamic variety of values, attitudes, experiences and perspectives with which he/she can better understand our society and its relationship to our evermore complex world.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner:

I. The Creative Process

A. Accumulation: The Raw Data of Experience

1. Where do ideas come from?

2. Perception

3. Cultural Perspective

4. Creativity

5. Art as Information

B. Selection: The Basic Elements

1. Components of Art

   a. Communication
   b. Composition
   c. Perspective

2. Structural Ingredients

   a. Medium
   b. Line
   c. Texture
   d. Color
   e. Harmony
   f. Rhythm

3. The artist's personal attributes: The Creative Personality

   a. Craftsmanship
   b. Sensitivity
   c. Originality

C. Process/Product

1. Music

2. Painting

3. Graphic Art

4. Dance

5. Drama

6. Film

7. Literature

3.1 Course Content Goal, continued

D. Evaluation

1. Characteristics of Great Art
2. Influences on evaluation of Art
3. Objectives for the student as evaluator of Art
4. Specific requirements
    - a. Attend at least one musical performance
    - b. Attend one dramatic performance
    - c. Attend one art exhibit
    - d. Attend a total of five performances and/or art exhibits and write a critical evaluation on each; 2 of which must be at Los Medanos College

II. The Media of the Visual Arts

A. Sculpture

1. Carving: The subtractive Process

    For example:
    - a. The art of the Mayas
    - b. The art of West Africa
    - c. Contemporary carving in America

2. Construction: The additive Process

    For example:
    - a. The art of DA-DA
    - b. The art of West Africa
    - c. The art of contemporary America

3. Casting: The translative Process

    For example:
    - a. The art of the IFE
    - b. Renaissance art
    - c. The art of contemporary America

B. Painting

1. The Mural
    - a. Egyptian murals
    - b. Mexican murals
    - c. Contemporary American murals
2. Canvas/easel painting
    - a. Realism
    - b. Abstraction
    - c. Mixed Media

ATTACHMENT 1

Step One in the Artistic Mode of Inquiry.

I. Collection
  A. Where do ideas come from?
    1. Natural environment
    2. Constructed elements in the environment
    3. History and culture Heritage
    4. Magic
  B. Perception
    1. What's really out there? (Metaphysics)
    2. How do we know? (epistemology)
    3. Personal perceptions based on the accumulation of raw data and past personal experiences
  C. Cultural Perspective
    1. Being taught what to see/hear
    2. Conditioned response
    3. The invisible/silent world
  D. Creativity
    1. Looking/listening to one thing but seeing/hearing something else
    2. Fooling around
    3. Willing suspension of disbelief or ability to believe the "unreal."
    4. Putting together things that haven't been put together before
    5. Utilizing personal experience
  E. Art is information
    1. Communication, both personal and cultural
    2. The audience as part of the process

3.1 Course Content Goal, continued

C. Graphic Design

1. Drawing

2. The Art of the Cartoon

3. Functional design: The World of Commercial Art

III. Analysis/Synthesis/Interpretation and Evaluation

A. Writing a critical observation

B. Analysing each of the media presented based on the creative process

C. Synthesize concepts in media presented, to preceive commonalities of from while recognizing differences in style

D. Writing objective and subjective interpretations of art

E. Projecting into the future function of art

NOTE: See attachments for details.

1. Step two in the Artistic Mode of Inquiry: Selection

I. The Basic Elements with which artists find bounds.

A. Communication is one of the basic reasons and motivations for art.
B. Composition - there must be an art work (composition) through which communication can occur.
C. Perspective - there is a frame of reference for both the artist and the audience. Art does not come out of a vacuum but comes out of the way we perceive things - cultural, ethical, ethnic, philosophical, psychological, physical perspectives.

II. Structural ingredients of Art with which the artist works.

A.

MUSIC	GRAPHIC ART	SCULPTURE	DANCE	DRAMA	FILM
Sound	Light	Medium (wood)	Movement to music in space	Action	Light and Motion
Melody (line)	Line	Line (shape in space)	Melody and spacial line	Line/dialogue	Line (in frame and from frame to frame
Form	Form (design)	Form (shape)	Form (shape in motion choreography)	Plot	Plot/motion
Texture (thick/thin)	Texture (rough/ smooth)	Texture (rough/smooth)	Solo/group	Solo/group (texture of light & sets)	Rough/smooth/thick/ thin/dark/light
Tone color (timbre)	Color	Color	Color (costume, lights, timbre)	Color (costume/ lights)	Color (b/w & light/ dark, costume/lights)
Harmony	Blend (color, line, shape)	Blend (color, line, shape, balance)	Harmony (music, rhythm, motion, space, color)	Harmony (characterization, blend of color, motion, tempo, sets, props, makeup, costumes)	
Rhythm (beat in time, tempo)	Rhythm (abstract motion)	Rhythm abstract motion)	Rhythm (beat tempo)	Rhythm (speed, beat)	Rhythm (slow motion, tempo, beat)

III. The Artist's personal attributes - who can do art and at what level of mastery (composer, performer, painter, dancer, sculptor, actor, director)?

A. Craftsmanship, pay your dues (technical training), talent, practice.
B. Sensitivity - Awareness, emotion, sensual accuity (good ears, eyes, hands, feet,spacial perception.
C. Originality - experimentation, accident, avant garde, control, functional purpose.

Step three in the Mode of Inquiry

Process/Product

1. Sculpture
2. Painting
3. Graphic Art
4. Music
5. Dance
6. Drama
7. Film
8. Literature

Step four in the Mode of Inquiry

EVALUATION OF THE ART PRODUCT

1. Characteristics of great art

    a. Must express universal truths that shed light on us and our experience
    b. Shows new relationships among the elements
    c. Simplicity
    d. Economy of means
    e. Unity
    f. Exhibits craftsmanship - mastery and control of the elements
    g. Integrity of materials
    h. Agelessness
    i. Durability
    j. Bears repeated encounters
    k. Concern for humanity
    l. Originality
    m. Influential
    n. Communicates to many
    o. Produces an emotional response

2. Influences on evaluation of art

    a. Previous experience with the art form (our "taste")
    b. Exposure to various styles and art forms. (See cartoon)
    c. Education - a set of skills which enables us to effectively perceive the art product
    d. Perception and interpretation of the art product
    e. Our memory of what occurred (important in music and drama)
    f. The reaction of others (the audience)
    g. Cultural background
    h. Age
    i. The purpose of the art product (functional or formal; utilitarian or aesthetic)

3. Objectives for the student as evaluator of art

    a. Become aware of personal past experiences with art and how these affect your "taste"
    b. Become equipped with a set of skills to effectively perceive and evaluate art
    c. Become exposed to a variety of styles of art
    d. Become aware of the various styles, how they differ, and how to evaluate each in its own category
    e. Become aware of functional (utilitarian) vs. formal (aesthetic) art forms
    f. Become aware of how age and cultural background influence our evaluation of art
    g. Attend or experience various art forms and write an evaluation of each

The report should include:

1. Printed program (if one available)
2. A brief description of each work
3. Comment on the notable features of the work (incorporating various elements of the particular art)
4. Personal evaluation of the art work

4. Specific requirements

   a. Attend at least one musical performance (concert or recital) and write an evaluation of it
   b. Attend at least one dramatic performance (play, musical comedy, opera) and write an evaluation of it
   c. Attend at least one art gallery showing and write an evaluation of it
   d. Attend a total of five (5) performances or art exhibits, two (2) of which must be at Los Medanos College

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
The course will present techniques for and provide the student opportunities to write critical reviews of art works and performances and essay exams.	The student will write critical observations and interpretations of various art forms. The student will write 5 critical observations and 4 essay exams. The students will read critical reviews and pertinent articles.	Sec. III	Lectures Observations Written critiques Read pertinent articles Written exams

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance their Effectiveness in Thinking

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
The course will provide an opportunity for creative problem solving through the mode of inquiry used by artists.	To meet one of the main objectives, perception, the students will be required to solve specific problems utilizing creative processes presented in class.	I. A. 2 I. A. 3 I. A. 4	Assignments in creative problem solving and conceptual block busting such as: . . . . "Connect the 9 dots with only 3 straight lines that connect." Identify blocks to creative thinking.

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
Intends to show the creative process used by artists.	The learner will be able to outline the steps of the creative process and give an example of each step.		Experiential exercises such as: 1. texture rubbings 2. drawing from more than one point of view.

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
The course will present examples of art forms from non-Western-European as well as Western cultures.	The learner will be able to identify art forms and styles from various times and cultures.	Refer to Sec. II and	Lecture Written exam Slide Identification
The course will look at the role of artists in various cultures.	The learner should realize the different roles artists are assigned in various cultures.	I. A. 3	

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
To familiarize the learner with the expressiveness, beauty, emotional characteristics, variety and profundity and subtlety of art.	The learner will be exposed to a variety of art styles and will be shown that many people, and potentially the student him/herself, derive increased pleasure and respect from viewing art.	This is a main thrust in this course. See entire course outline.	Art works Performance Displays Lecture Media Presentation Modeling (teacher as role model)

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline:

Values, Ethics and Future

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
Provide a basis for establishing a personal sense of value in art.	The learner will develop skills in critical observation and evaluation of art.	I. D. 4	Lecture: In-class practice Written observations of performances and exhibits
This course will demonstrate to the learner that art is a reflection of culture and its changing values.	The learner will be able to give specific examples of art forms and how these forms relate to the culture of which they are manifest.	II.	Lecture: Media presentation Written exams
To make students aware of the role of the artist in maintaining a humanizing overview of the world against the constant push of technology and other de-humanizing elements in society.	The learner will examine art and the role of artists in comprehending the human condition, historically and in our contemporary world.	3.1 III. E	Lecture Media Exams Attending art events

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Intends to show that the music/art are produced by people for people with the purpose of communicating.	The learner will develop a positive attitude toward other human beings and art forms, as demonstrated in journal writing and exams.	I. B. 1	Lecture, writing in journal. List various situations and compare.
2. Intends to show that the purpose of the arts is functional or aesthetic.	The learner will be able to distinguish the various uses of art: functional and aesthetic.	I. D. 2	Lecture, demonstration, class participation.
3. Intends to show that all arts share the same creative process.	The learner will demonstrate understanding of the commonalities of the creative process in the various disciplines.	I.	Lecture, exams
4. Intends to show that art is a reflection of the human condition.	The learner will develop an understanding of the cultural aspects of the arts.	III. A. III. B. IV. A. 1 IV. B. 1. a IV. C. 1. a IV. D. 1. a IV. E. 1. a IV. F. 1. a IV. G. 1. a, b	Lecture/Discussion Group discussion Journals

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry indigenous to the discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To familiarize the learner with the creative process:	1a. The learner will be able to collect and be aware of the raw data in art.	See Sec. I	LECTURE: Media Presentations. Experiential Exercises Such as: analyzing paintings, collecting rubbings of texture, line drawing, etc.
a. Collection	1b. The learner will become aware of selection process and elements used in making art.		
b. Selection	1c. Will become aware of a variety of forms and styles in art.		
c. Production	1c. Learner will become aware of craftsmanship in the production of art.		
d. Evaluation	1d. The learner will be exposed to traditional approaches to art evaluation.		
	1d. The learner will develop a personal evaluation of art.		Learner will attend ar events and write perso evaluations of them.

OTHER:

3.3 Other Goals and Objectives

GOALS	OBJECTIVES
To provide the learner an opportunity for self-directed enrichment.	The learner will select a topic and write a research paper or produce a project related to some aspect of the visual arts.

5. Evaluation and Grading Plans

EVALUATION PLAN

The students' achievement of course objectives will be evaluated by means of a point system:

1. Knowledge of art concepts, principles, vocabulary and an ability to apply these to specific examples will be measured by the student's level of performance on the following: problem assignments, reading assignments, essay examinations, critical evaluation papers of art and music events, a final examination, and written research project or paper.

2. Attitudes and knowledge of the relevance, societal implications and aesthetic qualities of art will be measured by the student's level of performance on examinations, critical observations and semester project.

3. Ability to think critically and analyze creatively will be measured by the student's performance on observation papers and essay writing assignments.

GRADING PLAN:

A total of 1000 points for this course will be distributed in the following manner:

A.	Examinations (4)	600 points
B.	Written observations (5)	200 "
C.	Written research paper	200 "

20% on written observation papers (5)

60% on Exams

20% on research paper or project

GRADING:

88 - 100% = A

75 - 87% = B

57 - 74% = C

50 - 56% = D

0 - 49% = F

6. Course Policies

State course policies, such as attendance, fees, materials, expectations regarding such activities as field trips, practicum, projects, and the like.

Attendance in class is expected.

Attendance at five (5) performances or exhibits is required outside of class time.

A reading/writing assessment will be made near the beginning of the course for skill evaluation.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Music 10LS

Music Literature

Course Author(s): Stan Smith, Jean Shrader, Larry Howard

For full and part-time music instructors.

1. CATALOG DESCRIPTION

Title of Course:	Music Literature
Course Number:	Music 10LS
Unit Value:	3 units
Mode of Instruction:	Lecture

Brief Description of the Course:

An intradisciplinary course providing an overview of the creative process with a focus on music. The course develops an aural analysis of music from many cultures and from past to present-day forms of musical creativity; it examines music as a reflection of the beliefs, social conditions and temper of the times. Sophistication in listening will be developed with attention to musical design, forms, style, instrumentation, and the derivation of increased pleasure from this art form. The course will allow the opportunity for creative problem solving through exercises and hands-on experiences, and will teach observation and critical skills through attendance at and evaluation of contemporary exhibits and performances.

Articulation Statement:

LMC Gen. Ed.
Transfer: UC, CSUC (Gen. Ed. area C)

2. OVERVIEW and RATIONALE

Overview

The Music Literature course introduces to the student the basic nature of Art and the artistic mode of inquiry, the creative process. The student will receive an introduction to elements of music such as melody, harmony, rhythm, form and texture through lecture/discussion/tests and practical exercises in creativity. Along with examining how Art is created, students will investigate the uses and aesthetics of Art. Aesthetics, ethics, social implications, psychological influences and cultural contributions in Art will be critically considered. World music (Art) will be surveyed with an emphasis on western music history. Students will be guided in listening activities and will be required to attend five live Art presentations (plays, galleries, concerts). A written critique on each presentation plus other class writings and essay tests will offer varied writing experiences.

Rationale

Because Art is universal and since experience and knowledge in Art is enriching and enhances the quality of human life, all students should have the opportunity to experience and learn about Art on a level that can be comprehended with little or no formal background. All students should be allowed to explore how we communicate (express) through music, dance, drama and the visual arts and to become aware of some of the social, cultural, technical, ethical, aesthetic and historical aspects of Art.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

*I. The Creative Process (Film - "Why Man Creates")

- A. Collection: the raw data of experience
    1. Where do ideas come from?
    2. Perception
    3. Cultural perspective
    4. Creativity
    5. Art as information
- B. Selection: the basic elements
    1. Components of art
        - a. Communication
        - b. Composition
        - c. Perspective
    2. Structural ingredients
        - a. Medium
        - b. Line
        - c. Texture
        - d. Color
        - e. Harmony
        - f. Rhythm
    3. The artist's personal attributes: the creative personality
        - a. Craftsmanship
        - b. Sensitivity
        - c. Originality
- C. Process/product
    1. Music
    2. Painting
    3. Graphic art
    4. Dance
    5. Drama
    6. Film
    7. Literature
- D. Evaluation
    1. Characteristics of great art
    2. Influences on evaluation of art

*For a more detailed outline of this portion of the course content, see Attachment 1 at end of this document.

3.1 Course Content Goal, continued

3. Objectives for the student as an evaluator of art
4. Specific requirements

    a. Attend at least one musical performance
    b. Attend at least one dramatic performance
    c. Attend at least one art exhibit
    d. Attend a total of five performance and/or art exhibits and write a critical evaluation on each; two of the performances or exhibits must be at Los Medanos College; one of the performances or exhibits must be an off-campus event.

II. Learning about music through effective reading and writing

A. How to read assignments

1. Preview

    a. Develop questions
    b. Sum up past knowledge
    c. Get as much substance out of the title as possible
    d. Read sub-headings then try to recall them without looking

2. Read the material
3. Review

    a. List words, phrases, sub-headings, key concepts
    b. Review the goal or purpose in reading the material

B. How to take effective class notes

C. How to write effectively for class written assignments and events

1. Journals
2. Essay tests
3. Research papers

    a. Footnotes
    b. Bibliography

III. Music of other cultures

A. African music

1. Influence in the western world (Cuba, Puerto Rico)
2. Influence on jazz

B. Asian music

1. Indian
2. Indonesian
3. Far Eastern
4. Latin American music
5. American Indian music

3.1 Course Content Goal, continued

IV. Capsule history of western music

A. Ancient

1. Art in mankind's rituals
2. Legacy of the Greeks, Romans, and Hebrew-Christian tradition
3. Chant (Ambrosian, Gregorian)

B. Medieval (1100 - 1450)

1. Introduction

a. Historical background
b. Literature, architecture, painting, feudalism, Magna Carta, etc.

2. Sacred polyphony
3. Secular monody polyphony (Troubadours)

C. Renaissance (1450 - 1600)

1. Introduction

a. Historical background (Gutenburg press, Reformation, etc.)
b. Literature, sculpture, painting, fresco, philosophy

2. Polyphony

a. Master composers and works (Palestrina)

3. Madrigal

a. Examples

4. Instruments

D. Baroque (1600 - 1750)

1. Introduction

a. Historical background and art of the period

2. Musical style
3. Musical forms (concerto grosso, fugue, suite, opera, oratorio, etc.)
4. Biography of main composers

a. Bach (Videotape - "The Joy of Bach")
b. Handel

E. Classical (The Age of Reason) (1750-ca. 1825)

1. Introduction

a. Historical background and art of the period

2. Musical style
3. Musical forms (sonata-allegro form, symphony)
4. Master composers and works (Haydn, Mozart)

3.1 Course Content Goal, continued

F. Romantic (ca. 1825 - ca. 1900)

1. Introduction

   a. Historical background and art of the period

2. Musical style
3. Master composers and examples of works (from Beethoven on)

G. Twentieth-century (ca. 1900 -)

1. Introduction

   a. Historical background and art of the period
   b. Influences of Freud, Einstein, existentialism, etc.

2. Musical styles (impressionism, expressionism, primitivism, neo-classicism, etc.) and composers
3. New forms (duodecuple, serial, electronic, mathematical, chance) and composers
4. Importance of the arts in our technological age

ATTACHMENT 1

Step One in the Artistic Mode of Inquiry.

I. Collection

- A. Where do ideas come from?
  1. Natural environment
  2. Constructed elements in the environment
  3. History and culture Heritage
  4. Magic
- B. Perception
  1. What's really out there? (Metaphysics)
  2. How do we know? (epistemology)
  3. Personal perceptions based on the accumulation of raw data and past personal experiences
- C. Cultural Perspective
  1. Being taught what to see/hear
  2. Conditioned response
  3. The invisible/silent world
- D. Creativity
  1. Looking/listening to one thing but seeing/hearing something else
  2. Fooling around
  3. Willing suspension of disbelief or ability to believe the "unreal."
  4. Putting together things that haven't been put together before
  5. Utilizing personal experience
- E. Art is information
  1. Communication, both personal and cultural
  2. The audience as part of the process

1. Step two in the Artistic Mode of Inquiry: Selection

I. The Basic Elements with which artists find bounds.

A. Communication is one of the basic reasons and motivations for art.
B. Composition - there must be an art work (composition) through which communication can occur.
C. Perspective - there is a frame of reference for both the artist and the audience. Art does not come out of a vacuum but comes out of the way we perceive things - cultural, ethical, ethnic, philosophical, psychological, physical perspectives.

II. Structural ingredients of Art with which the artist works.

A.

MUSIC	GRAPHIC ART	SCULPTURE	DANCE	DRAMA	FILM
Sound	Light	Medium (wood)	Movement to music in space	Action	Light and Motion
Melody (line)	Line	Line (shape in space)	Melody and spacial line	Line/dialogue	Line (in frame and from frame to frame
Form	Form (design)	Form (shape)	Form (shape in motion choreography)	Plot	Plot/motion
Texture (thick/thin)	Texture (rough/smooth)	Texture (rough/smooth)	Solo/group	Solo/group (texture of light & sets)	Rough/smooth/thick/thin/dark/light
Tone color (timbre)	Color	Color	Color (costume, lights, timbre)	Color (costume/lights)	Color (b/w & light/dark, costume/lights)
Harmony	Blend (color, line, shape)	Blend (color, line, shape, balance)	Harmony (music, rhythm, motion, space, color)	Harmony (characterization, blend of color, motion, tempo, sets, props, makeup, costumes)	
Rhythm (beat in time, tempo)	Rhythm (abstract motion)	Rhythm abstract motion)	Rhythm (beat tempo)	Rhythm (speed, beat)	Rhythm (slow motion, tempo, beat)

III. The Artist's personal attributes - who can do art and at what level of mastery (composer, performer, painter, dancer, sculptor, actor, director)?

A. Craftsmanship, pay your dues (technical training), talent, practice.
B. Sensitivity - Awareness, emotion, sensual accuity (good ears, eyes, hands, feet,spacial perception.
C. Originality - experimentation, accident, avant garde, control, functional purpose.

Step three in the Mode of Inquiry

Process/Product

1. Sculpture
2. Painting
3. Graphic Art
4. Music
5. Dance
6. Drama
7. Film
8. Literature

Step four in the Mode of Inquiry

EVALUATION OF THE ART PRODUCT

1. Characteristics of great art
    - a. Must express universal truths that shed light on us and our experience
    - b. Shows new relationships among the elements
    - c. Simplicity
    - d. Economy of means
    - e. Unity
    - f. Exhibits craftsmanship - mastery and control of the elements
    - g. Integrity of materials
    - h. Agelessness
    - i. Durability
    - j. Bears repeated encounters
    - k. Concern for humanity
    - l. Originality
    - m. Influential
    - n. Communicates to many
    - o. Produces an emotional response

2. Influences on evaluation of art
    - a. Previous experience with the art form (our "taste")
    - b. Exposure to various styles and art forms. (See cartoon)
    - c. Education - a set of skills which enables us to effectively perceive the art product
    - d. Perception and interpretation of the art product
    - e. Our memory of what occurred (important in music and drama)
    - f. The reaction of others (the audience)
    - g. Cultural background
    - h. Age
    - i. The purpose of the art product (functional or formal; utilitarian or aesthetic)

3. Objectives for the student as evaluator of art
    - a. Become aware of personal past experiences with art and how these affect your "taste"
    - b. Become equipped with a set of skills to effectively perceive and evaluate art
    - c. Become exposed to a variety of styles of art
    - d. Become aware of the various styles, how they differ, and how to evaluate each in its own category
    - e. Become aware of functional (utilitarian) vs. formal (aesthetic) art forms
    - f. Become aware of how age and cultural background influence our evaluation of art
    - g. Attend or experience various art forms and write an evaluation of each

The report should include:

1. Printed program (if one available)
2. A brief description of each work
3. Comment on the notable features of the work (incorporating various elements of the particular art)
4. Personal evaluation of the art work

4. Specific requirements

   a. Attend at least one musical performance (concert or recital) and write an evaluation of it
   b. Attend at least one dramatic performance (play, musical comedy, opera) and write an evaluation of it
   c. Attend at least one art gallery showing and write an evaluation of it
   d. Attend a total of five (5) performances or art exhibits, two (2) of which must be at Los Medanos College

3.2 Criteria **Related Goals**: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Intends to show that the performing and visual arts (music, painting, sculpture, drama, dance, cinema, etc.) are produced by people for people with the purpose of communicating.	1. The learner will compare and contrast a variety of styles of music and art and will demonstrate an acceptance of music and art as being a valid and sincere expression of human beings.	1. I. B.1	1a. Lecture/Exam. b. Audio and audio-visual presentations c. Writing reactions to musical and other artistic events d. Group discussion
2. Intends to show that the purpose of music and the other arts is functional or aesthetic.	2. The learner will analyze and evaluate the uses of music and art in the spectrum of functional through aesthetic.	2. I. D.2	2. Students list various situations where music and the other arts occur and compare and contrast these in group discussion.
3. Intends to show that all arts share the same creative process.	3. The learner will demonstrate an understanding of the commonalities of the creative process in the various disciplines - music, art, drama, etc.	3. I.	3a. Lecture/Exam b. Demonstration through comparative analysis.
4. Intends to show that art is a reflection of the human condition.	4. The learner will be able to discuss relationships between the musical style and the culture from which it evolved, relating the arts to each other and to other societal and cultural conditions.	4. III. A, B IV. A. 1 IV. B. 1a IV. C. 1a IV. D. 1a	4a. In-class writing exercises. b. Group discussion c. Lecture

OTHER:

3.2 **Criteria Related Goals**: Criterion: **Modes** of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. Intends to familiarize the learner with the creative process (collection, selection, product/process, evaluation) found in the arts (music, art, drama, dance, cinema, etc.)	1a. The learner will collect raw data (sounds)	1. I.	1a. Experiental exercises such as small group composing with origin sound sources.
	1b. The learner will select musical elements such as melody, rhythm, harmony, texture, timbre, to be used in making music.		1b. Lecture and media presentations.
	1c. The learner will analyze a variety of forms and styles in the arts.		1c. Lecture and media presentations.
	1d. The learner will examine craftsmanship in the production of the arts.		1d. Lecture and media presentations.
	1e. The learner will examine and report on the traditional approaches to evaluation of music and the other arts.		1e. Lecture and in-class writing exercises.
	1f. The learner will write personal evaluations of art works.		1f. The learner will attend five art events (concerts, plays, art exhibits, etc.) and write personal evaluations of them.

OTHER:

3.2 **Criteria Related Goals: Criterion:** Aesthetics of Knowledge

Criterion **stated** in **goal form**: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. Intends to familiarize the learner with the emotional aspects, variety, beauty, profundity, expressiveness, and subtlety in music and the other arts.	1. The learner will be exposed to a variety of musical styles and will be shown that many people, and potentially the student him/herself, derive increased pleasure and respect from listening to or participating in music.	This is a main thrust in this course. See the entire course outline.	1a. Lecture b. Media presentations c. Experiencing art works, performances, and displays in class d. Teacher as role model

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Intends to demonstrate to the learner that Art is a reflection of culture and its changing values	1. The learner will be able to give specific examples of art forms and how these forms relate to the culture of which they are manifest (ethno-music and period music)	1. II. III.	1. Essay questions on exam
2. Intends to provide a basis for establishing a personal sense of value in Art.	2. The learner will evaluate art critically.	2. I. D. 3 I. D. 4	2a. Lecture b. In-class practice c. Student's written observations.
3. Intends to show that through the arts a human perspective on life can be sustained amidst the technological push and other dehumanizing elements of our contemporary society.	3. The learner will examine art and the role of artists in comprehending the human condition.	3. IV. G. 4	3a. Lecture b. Discussion c. Attending art events

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Intends to provide the learner with assigned reading material related to music.	1. The learner will be given the opportunity to improve skills in reading through assignments and instruction in how to read.	1. II. A	1a. Lecture b. Demonstration c. Text - (optional) *The Understanding of Music* by Hoffer. d. Various handouts and assigned readings in the reserve and reference sections of the Learning Center
2. Intends to provide the learner with in-class writing assignments.	2. The learner will be given the opportunity to improve skills in writing through various writing assignments and instruction in how to approach various situations.	2. II. B II. C	2a. Lecture b. In-class practice in: 1. taking class notes 2. summarizing class presentation 3. writing in journals 4. writing critiques of live art presentations 5. writing essay exam questions

3.2 Criteria Related Goals: Criterion: Reading and Writing

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
3. Intends to present techniques for and provide the student with opportunities for writing critical reviews of art works and performances.	3. The learner will write critical observations and interpretations of various art forms.	3. I. D. 4.d	3a. Lecture on how to write a critique or report of a performance b. Reading and discussion of handout "How Do I Write a Report When I'm Supposed To Be Listening." c. In-class practice on writing critiques. d. Five written critiques required after attendance at live art presentations.
4. Intends to develop students' reading and writing skills.	4a. The learner will know his/her reading and writing skills compared to the levels expected for successful course completion. b. The learner will understand the value and availability of tutorial assistance.	4. II.	4a. Administer reading and writing assessment. b. Introduce students to tutorial help and periodically remind them to avail themselves of this assistance.

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance The Effectiveness in Thinking

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Intends to provide an opportunity for creative problem solving through the mode of inquiry used by artists.	1. The learner will tackle specific problems utilizing creative processes presented in class.	1. I. A. 2 I. A. 3 I. A. 4	1. Assignments in creative problem solving and conceptual block busting, such as, Why does man create? What is music? What is a masterwork? What is the affect of music - morally, sociologically, biologically, spiritually, psychologically.
2. Intends to provide an opportunity for critical evaluation of art works and performances.	2. The learner will write five critiques of performances which demonstrate a personal evaluation of the art works.	2. I. D. 3 I. D. 4	

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Process and Examples of Human Creativity

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Intends to show the creative process used by artists.	1. The learner will be able to outline the steps of the creative process and give an example of each step.	1. I.	1a. Lecture b. Experiential exercises 1. students bring interesting sounds to class as an example of the "collection" step 2. Students prepare and perform a composition using the sounds they brought to class and their knowledge of the creative process to illustrate the "selection" step and the "process" of putting it together.
2. Intends to show a variety of creative examples from western and non-western cultures.	2. The learner will be exposed to music from a variety of cultures and historical periods.	2. III. IV.	2a. Lecture b. Media presentations

OTHER:

3.2 Criteria Related Goals: Criterion: **Pluralism**

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impace on Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Intends to present examples of art forms from non-western as well as western-European cultures.	1. The learner will be able to identify art forms and styles from various periods and and cultures.	1. III. IV. I. A. 3	1a. Lecture b. In-class practice
2. Intends to look at the role of musicians in various cultures and historical periods.	2. The learner will compare/contrast the different roles musicians are assigned in various cultures and times.	2. III. IV.	2a. Lecture b. Essay tests c. Ethnomusic demonstrations d. Historical research
3. Intends to provide the learner with an opportunity for self-directed enrichment project.	3. The learner will select a topic and do a research paper or a project (live, taped, videotaped, filmed or written) related to some aspect of music.	3. See entire course outline	3. Student projects

OTHER:

4. Texts and Other Instructional Materials

Optional purchase by student - _The Understanding of Music_, fourth edition by Charles R. Hoffer (Wadsworth Publishing Company, Belmont, California)

Film - _Why Man Creates_

Videotape - _The Joy of Bach_

5. Evaluation and Grading Plans

EVALUATION PLAN

The student's achievement of the objectives stated for this course will be evaluated as follows:

1. Knowledge of the course content will be evaluated by the level of performance on unit exams and the final exam which will include essay questions as well as objective test questions.
2. Knowledge of the mode of inquiry (the creative process) and the intradisciplinary nature of the arts will be assessed by the student's performance on examination essay questions.
3. Awareness of the aesthetics and implications of music as well as the student's ability to think critically will be evaluated by the written critiques done by the student after attendance at five live art productions (concerts, plays, art exhibits).
4. Knowledge of how creativity is exemplified in music throughout history and in various cultures will be assessed on unit and final exams as well as in the student's self-directed enrichment project (research paper; preparation of a tape, videotape or film; live presentation) on a topic related to some aspect of music.

GRADING PLAN:

Examinations - 60%

Written critiques of art presentations - 20%

Research paper or project - 20%

6. Course Policies

Attendance at five (5) live performances or exhibits outside of class time is required of all students taking this course.

All students will participate in a reading and writing assessment near the beginning of the course and, when appropriate, will be strongly encouraged to seek tutorial help.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Humanistic Studies 40LS

Philosophers of the World

Course Author(s): Connie Missimer

For full and part-time humanistic studies instructors.

1. CATALOG DESCRIPTION

Title of Course:	Humanistic Studies 40LS, "Philosophers of the World"
Course Number:	40 LS
Unit Value:	3 units
Mode of Instruction:	Lecture

Brief Description of the Course:

Consideration of some questions of the great philosophers in world history and their contributions toward answers to these questions. Students will be challenged to develop further their own personal philosophies within a world context. The course will demonstrate the interrelationship of knowledge across disciplines, including the philosophical ideas that underlie other disciplines, such as philosophies of art, science, and history. While Western trends will predominate, numerous Chinese and Indian philosophies will be cited, with attention given to their traditions. Critical thinking skills will be sharpened through the generation of an extended written dialogue, probing a philosophical premise.

Articulation Statement:

LMC Gen. Ed.
Transfer: UC. CSUC (Gen. Ed. Area C)

2. OVERVIEW and RATIONALE

Overview

The course deals with the main philosophical thinkers throughout history. While Western trends will predominate, numerous Chinese and Indian philo-sophers will be cited, with attention given to their traditions. The course will examine various thinkers in the light of recurrent philosophical themes, such as the notion of human nature and the nature of knowledge. Philosophies of art, science and history will also be explored. Students will write a six to eight page dialogue towards the end of the semester.

Rationale

This course, which examines the nature of knowledge and of human thought itself, is the hallmark of the humanities. Students will examine theories of what constitutes truth in art, in science, in religion, so that the course showcases the mode of inquiry in all the disciplines. Students will enjoy the uniqueness and elegance of various philosophical theories throughout history. Critical thinking skills will be developed as students create their own mini-philosophical position. To encourage pluralism, ideas of major non-Western thinkers will be presented, including those of India and China, as well as the African traditional theory of time and American Indian social philosophy.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Introduction (1 week)

  A. Traditional Concerns of Philosophers

    1. Metaphysics - the external world
    2. Epistemology - the nature of knowledge
    3. Axiology - values and e-valu-ation
    4. Various 'philosophies of': History, art, even sports

  B. We all operate out of philosophical stances concerning the above, but usually without benefit of philosophical scrutiny, these are usually only dimly perceived. Value of such scrutiny.

  C. Task of course is for student to create a more coherent philosophy.

  D. Overview of the rest of the course; reading and writing exam.

II. Views of Human Nature (2 weeks)

  A. Two Essentialist Views of Human Nature

    1. The rational view: a) Plato b) Aristotle
    2. The religious view: a) text author's view of Christianity's view of human nature
       b) contrasting view of Christianity's view of human nature.

  B. Challenges to Essentialist Views

    1. Materialist view - B.F. Skinner, Freud
    2. The Existential view - Sartre, Lao Tzu
    3. Eastern views a) Buddhism b) Hinduism

  C. Some Observations

    1. Notice the huge difference among these views and their implications
    2. Plato on women and equality

III. Social Philosophy (2 weeks)

  A. Law

  B. Freedom

  C. The Growth of Individualism

    1. comparison with Confucianism and Taoism

  D. Liberalism and Conservatism

  E. The Just Society

F. The Contract Theory a) Rousseau b) Hobbes c) Locke

G. The 'Maximin Principle' John Rawls vs. the Entitlement Theory

H. The Entitlement Theory - Robert Nozick

I. Toward Community - Jack Forbes on American Indian social philosophy

IV. Philosophy of Art (2 weeks)

A. The Aesthetic Experience

B. Theories of Art

1. instrumental: handicrafts, education, vicarious experience
2. imitation: realism, idealism
3. expression of artist: art for art's sake

C. The Aesthetic Judgment

V. Epistemology (2 weeks)

A. The Nature of Knowledge as an ancient question

B. Rationalism Descartes' answer to the question, "how do I know I even exist?"

C. Empiricism defined - "How can I know the difference between my impressions of a thing and the thing in itself?"

1. Locke answers
2. Berkeley answers
3. Hume answers The puzzle of causation
4. Phenomenalism and Kant's answer
5. Sankara on the thing and the impression of it

VI. Truth (1 week)

A. Defined as Warranted Belief

B. Correspondence Theory (It's true if it corresponds to external world)

C. Coherence Theory (It's true if it is consistent with other held truths)

D. Pragmatic Theory (It's true if it works)

E. Compatibility of the Truth Theories

F. "In a Grove" by Ryunosuke Akutagawa

3.1 Course Content Goal, continued

VII. Philosophy of Science (1 week)

A. Scientific Method

1. Francis Bacon
2. Claude Bernard

B. Solution to Hume's dilemma about causation (V 3., above)

C. The value of scientific hypotheses

D. Kuhn's thesis of science as myth versus

E. Popper's thesis of 'approximationist verisimilitude'

VIII. Philosophies of Time (1 week)

A. African traditional theory of time as movement forward into history

B. "Common sense' view of time

C. Implications of Einstein's theory on time

D. Contrast of A., B., and C.

IX. Metaphysics (2 weeks)

A. Reality as Matter

1. The development of materialism: a) Lucretius b) Democritus c) Indian materialism
2. Objections to materialism

B. Reality as Nonmatter

1. The development of idealism: a) Paramahansa Yogananda, b) Sri Aurobindo c) Plotinus d) Berkeley
2. Objections to Idealism

C. Reality in Pragmatism

1. The Pragmatic Method - William James and pluralism
2. Objections to pragmatism

D. Reality as Being

1. Phenomenology
2. Existentialism

E. The Analytical School

1. Objections to Linguistic Analysis

F. Explanation of dialogue requirements to students

3.1 Course Content Goal, continued

X. Philosophy and Religion

   A. Theism

      1. The Ontological Argument
      2. The Cosmological Argument
      3. The Design Argument
      4. Objections to Theism - Bertrand Russell

   B. Pantheism

      1. Hinduism as a monistic pantheism
      2. Taoism

   C. Atheism and objections to atheism

   D. Agnosticism and objections to it

   E. Life after death and religious belief

   F. Mysticism - Aldous Huxley's claim about 'The Perennial Philosophy'

   G. Radical Theology and objections to it

   H. Buddhism and Zen Buddhism

   I. Differences between East and West

XI. Philosophy and Autonomy (1 week)

   A. Philosophy and Self-Discovery

   B. Students exchange dialogue projects

   C. Obstacles to Autonomy

      1. avoiding fateful decisions
      2. stacking the cards
      3. declining responsibility

   D. Making decisions with open eyes

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. Show that philosophers have examined the basic notions of most other areas of thought.	1. The learner should be able to express this concern in relation to the main ideas of the foremost world philosophers.	1. I A 4; II (psychology) III (history); IV (art) VII (science); X (religion)	1. Lecture, student discussions, textbook readings.
2. Show that there have been a variety of ways of evaluating basic philosophical issues throughout history.	2. Through discussion, students should become more adept at holding several theories in mind at the same time, as well as being able to spot the contradictions among them (e.g., that the Christian and the materialist views of human nature are in conflict.)	2. Each segment of the course outline contains such mutually exclusive (or partly inconsistent) theories	2. Lecture and discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. The Socratic Method. Philosophers often ask what seem to be trivial or stupid questions, such as "How do we really know that what we see is out there as we see it?"	1a. Students should be able to explain how such questions lead to the fundamental presuppositions of other disciplines (see p.1)	1a. II, III, IV, V, VII, & X	1a. Lecture, discussion and student dialogue.
	b. Students should use this method from the start of the course, and become more skilled over time.	b. Instructor should show how almost every philosopher mentioned in the course outline started with a basic question.	b. Student discussion - (e.g., ask them to discuss with their neighbor in class how Berkeley might answer Hume's objections to his theory of idealism)
			c. Student dialogue.

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach about the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. Give students an appreciation of the Fine Arts.	1. Students will be able to discuss the variety of theories of aesthetics, and display some rudimentary skill at making aesthetic judgments.	1. IV A, B, and C	1. Lecture, discussion, trip to LMC Art Gallery; bring in several examples of art from around the world.
2. Show that philosophizing is itself an aesthetic pleasure.	2a. Have students enjoy the uniqueness and elegance of various philosophical theories throughout history.	2a. II A 1; B 2; C 2; III F, G, H; IV B; V B, C; VI B, C, D; VII A; VIII D; IX A 1, B1, C1, X A, B, F	2a. Lecture, discussion
	b. Have students participate in the pleasure of creating their own mini-philosophical position.	b. IX F	b. Student Dialogue

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. A crucial connection exists between the great philosophers' ideas and and their influence on societies throughout history	1a. The student should be able to explain this point and provide several examples.	1a. II, III, X	1a. Lecture, discussion
	b. The student should also realize that she/he looks at the world through 'philosophical glasses' which are themselves the result of past philosophical opinions e.g., Descartes and the mind-body duality)	b. I B, C; II B 2, 3; VIII A; X H 1	b. Lecture, discussion
2. The influence of philosophical ideas upon other disciplines, and vice versa.	2. The student should be able to notice that some of the basic philosophical ideas they have learned underlie their other courses (see p. 1, #1)	Other courses	2 Lecture, discussion, assignment to 'locate basic assumptions of another class you are taking' (see also "Critical & Effective Thinking)

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Reading To enable students to become more proficient at reading somewhat complicated ideas.	1. Students should become more adept at reading a series of conflicting philosophical notions. Eventually, without help from me, they should be able to see: 1) that the ideas conflict 2) how they are in conflict (i.e., where the disagreement lies)	1. Whole course outline, but see especially V and IX	1. Homework assignments to read the text, as well as other handouts. Class discussion about the readings; clarification during lectures of how viewpoints differ.
2. Writing To enable students to become proficient in writing accurately about the philosophers studied.	2a. Students must write four essay examinations.		2. Examinations (all essay)
	b. Students must complete a 6-8 page dialogue on some philosophical issue.	2. IX F	

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. A very important aspect of critical thinking involves learning the basic assumptions about: a. various areas of knowledge through history*	1. To take some examples that the student should learn in each of these three areas: a. areas of knowledge such as aesthetics, science, human nature theories.	1. (Assumptions in science, VII) (Aesthetics' assumptions, IV B) (Human nature, II)	1a. Lecture, discussion, reading.
b. about knowledge itself**	b. about knowledge itself, such as the assumption of progress, or the assumption of the primacy of faith over reason, of the nature of knowledge.	(VII; X B 1) (pro & con in X) V	b. Lecture, discussion, readings.
	The students will be able to describe these and other assumptions operating in their other subjects.		c. Lecture, discussion, special assignment to 'locate basic assumptions of another class you are taking'.

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To show many examples of creative thought throughout the history of philosophy.	1. Students should be (and usually are) surprised by the creativity exercised by philosophers to get 'below the seeming surface of things'.	1. Most of the outline, but see especially III E,F,G; VA B,C; VII A,B,C; VIII	1. Lecture
2. To encourage students to think in a creative philosophical fashion.	2. Students should be able to write effective essay exams and to write an inventive philosophical dialogue.	2. IX F	2. Encouraging students to debate philosophical issues with me and with each other in class.
3. To show the connection between creativity and an interest in the truth.	3. Students should express an understanding of the fact that the search for the answers to basic human questions is a creative process.	3. VII; VIII C; X A	3. Lecture, discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that Have an Impact on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To show that philosophy is a human need and activity that has existed throughout world history.	1. The entire course is devoted to a consideration of different intellectual perspectives. But students should also be able to explain preliminary ideas of major non-Western thinkers of: a. India b. China as well as define c. African traditional theory of time d. American Indian social philosophy	1a. V C 5; IX A 1 c; X B 1; II B 3; IX B 1 a, b; X H (Japan) II B 2; III C 1; X B 2 b. VIII A III	1a. Lecture, discussion b. Lecture Video-tape

OTHER:

3.3 Other Goals and Objectives

GOALS	OBJECTIVES
To make the course interesting and humorous whenever possible.	To get the students to laugh.
To foster happy inter-personal relationships among the students.	To have each student get to know every other student by name in the class by making them go and 'sit with a stranger' during every discussion.

4. Texts and Other Instructional Materials

Required Textbook:

Philosophy: A Text With Readings, Vincent Barry

Other Instructional Materials:

Various handouts;

Two video-tapes: Jacob Bronowski, "Knowledge or Certainty?"
Jack Forbes, "Unchanging Values: A Multicultural Perspective"

5. Evaluation and Grading Plans

EVALUATION PLAN

By week 3, a 'pretend' quiz, which is discussed in class to help them evaluate their study needs.

Three quizzes,	20	points each
Final	15	points
Student Dialogue	20	points
Attendance	5	points
Total	100	

GRADING PLAN:

Grades will not be on a curve, but will reflect student performance vis a vis the points.

88 - 100% = A

75 - 87% = B

62 - 74% = C

50 - 61% = D

0 - 49% = F

6. Course Policies

Attendance: Students are, of course, expectd to attend, and will get points for doing so.

If a student does not attend a class, she/he is responsible for getting notes and assignment from another student.

Fees: None

Materials: Text (purchased by the student); handouts.

Field Trips: None

Projects: Students are required to write a six to eight page dialogue concerning a philosophical issue of their choice. The paper must be type-written and closely argued.

Exercises to assess students' reading and writing abilities will be administered at an appropriate time during the first weeks of class. Where appropriate, students will be referred for assistance by the class tutor or other resources.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Humanistic Studies 41LS

Critical Perspectives in Logic

Course Author(s): Connie Missimer

For full and part-time humanistic studies instructors.

1. CATALOG DESCRIPTION

Title of Course:	Critical Perspectives
Course Number:	Humanistic Studies 41LS
Unit Value:	3 units
Mode of Instruction:	Lecture

Brief Description of the Course:

An understanding of how the principles of critical analysis and logic can help to solve pressing current issues. The course will stress methods of locating arguments and critically evaluating their structural elements. The interrelationship of knowledge across disciplines will be demonstrated, particularly linkage of the reasoning process with other disciplines. Reasoning skills will be applied to the arguments of major thinkers from a variety of cultures, and opportunities will be provided for students to create arguments for and against a current issue of their choice

Articulation Statement:

LMC Gen. Ed.
Transfer: UC. CSUC (Gen. Ed. area A)

2. OVERVIEW and RATIONALE

Overview

This course is designed to deal with some of the major ethical issues of the day in the light of techniques of solid reasoning. Starting with the simplest tasks and presuppositions, the course will proceed to more complex as well as more precise ideas as well as techniques. Students will then 'try their wings', creating arguments for and against a current ethical issue of their choice.

Rationale

The course makes explicit the basic features of the reasoning process, the understanding of which is vital for life-long ethical self-education.

It demonstrates the interrelationship of knowledge across disciplines, as well as dealing with the features of ethical and rational valuation. Students should become aware of the major assumptions and starting points of ethical thinkers from various cultures, but primarily, the course should familiarize them with the crucial connection existing between the reasoning process, social concern, and the ability to create a better society.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

Assume approximately two weeks per unit (although I takes one week, and II takes three)

I. Introduction

A. Only three ways to persuade: emotion, force, and reason (or are there others?)

B. Argument for primacy of the latter and its relationship to an ethical society.

C. The rational stance: maybe I'm wrong and you're right; let's reason together to arrive at the truth. Why society needs this stance (or does it?)

D. Reason first, emotion, second. False dichotomy between reason and feeling.

E. "Yes, but..." as a permanent technique.

F. Overview of the rest of the course; reading and writing examination.

G. The Ziegarnik Effect (Lack of closure ensures more learning)

H. Are values subjective or objective?

II. The Basic Features of an Argument:

A. Primary Example: abortion, argument for.

B. What is at issue?

C. What is being concluded, what 'base-line' (premise(s) is asserted?

D. What evidence is offered?

E. Crucial importance of how B, C, & D are linked.

1. via hidden assumptions, either

a. definitional (e.g., of what 'human life' is)
or b. value (e.g., that it is of greater value for an individual to be free than to carry a fetus to term)

2. via inference(s), the ever-present 'leap(s)' between premises and conclusion

F. Ethical issues contain a 'should', a 'moral pull'.

G. Further examples to engage students: euthanasia, terrorism

H. Self vs. others; various modes of ethical inquiry.

3.1 Course Content Goal, continued

III. Further Features of an Argument:

- A. Primary example: abortion, argument against.
- B. Exposition of II B through E, on the 'con' side of abortion
- C. Comparison of II B through E pro and con abortion
- D. Importance of tone, connotation (e.g., 'fetus' vs. 'unborn child'
    - 1. eliciting of other examples of tone from the 'further examples' above (II G), e.g., 'revolutionary' vs. 'terrorist' (or is there a real difference?)
- E. Bi-polar thinking: at times a pit-fall, at times necessary
- F. Consequentialist vs. non-consequentialist approaches to ethics

IV. Should We Always Tell The Truth? Inductive vs. Deductive Approaches to The Problem

- A. Deduction - begins with a general principle and subsumes a particular instance, e.g., we should always do what the Bible says (Gen. Prin.) Therefore, we should always tell the truth.
    - 1. Truth vs. validity (the deduction here is valid, but the conclusion is true only if the premises are also true).
        - a. validity and Venn diagrams (the joy of seeing the inevitability of reasoning - an aesthetic experience)
        - b. Use of the counter-example to challenge a truth claim, a particular instance in the Bible showing that lying was o.k., even clever: Esau & Jacob for example.
- B. Induction - begins with a group of particular instances and arrives at a generalization, e.g.,

#1 instance of truth-telling and its (say) bad consequences
#2 instance
#3
etc.

Inductive leap ______________________________

Conclusion: Truth-telling tends to have bad consequences.

- 1. Danger of making inductive leaps without sufficient footing
    - a. sample size, spread
    - b. tips on when to leap and how far (see also VI)
- C. How the mind constantly works both inductively and deductively. Students must come up with ethics examples from their experience.

3.1 Course Content Goal, continued

D. Relation between basic features of an argument (II, III) and induction/deduction (IV)

E. Further examples to engage students: should we always keep our promises? Should we increase military spending?

F. A parting 'deductive shot' at the truth-telling issue: Language contains an inherent promise to tell the truth. Discussion of the relationship of language, reason and ethics.

V. Cause and Effect

A. Primary issue: should smoking be prohibited in all public places?

B. Scientific Method as a combination of deductive hunch and induction: the 'brain-eye-hand' method. Linkage of scientific thinking.

1. example using results of tests concerning smoking.
2. Evaluation of results by the Tobacco Industry and the Surgeon General.

C. Arguing for social policy on the basis of analogous situations (e.g., alcohol use, heroin)

1. strengths and limitations of analogies
2. limits of applicability of the scientific method

D. Further examples for student processing: Do animals have rights? Do trees have standing? Is genetic engineering harmful?

E. Life goals and ethics

VI. The Question of Likelihood - How to Assign Claims an Epistemological Weight.

A. Are we now, or have we ever been, visited by beings from outer space?

1. Von Daniken's thesis
2. The counter-arguments
3. Effects of thinking that other cultures are 'too dumb' to have done things we still can't do.

B. Difference between wanting something to be true and its truth.

C. How to recognize that evidence is limited.

D. Fallacy of proof by failure to find a counter-example.

E. Further ethical example: should homosexuals teach children?

F. Approaches of theorists Ross and Mandelbaum.

3.1 Course Content Goal, continued

VII. Common Fallacies

A. Social issue: What should be done about illegal immigration?

B. Equivocation and ambiguity.

C. Begging the question.

D. Ad hominem, ad feminam attacks.

E. Additional pit-falls.

F. Additional issue; Who has the primary responsibility for the care of the elderly: the government or the individual's family?

G. Ethical inquiry out of Rawls' eyes.

VIII. Student Projects

Students are required to construct arguments pro and con a current ethical issue of their choice, and to indicate the features of their arguments in the margin (e.g., 'conclusion', 'issue', etc.).

The class will discuss and 'take on' the best arguments.

A. The rule of charity (see an argument in its best possible light).

IX. Summary

A. Agreeing to disagree.

B. Karl Popper's article arguing that the only ethical society is one based on faith in reason.

C. The final examination: student evaluation of Popper's argument.

.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1a. Show linkage of reasoning process with other disciplines (see p. 1, 2)	1. The learner should: a. see this linkage, at least in part I A, C; II B-F;	1. The whole course; but see especially I A, C; II B-F; III D, IV, V	1. Lecture, student projects
b. Get students comfortable with values and with evaluating (see p. 3)	b. be able to move with greater ease in this reasoning process and in the evaluation of ethical claims.	II A, F, G; III A; IV A, E, F; V A, D; VI A 3; VII A, F; VIII, IX	

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To teach the mode of ethical inquiry.	1. The student should become conversant with some of the major assumptions and starting points of ethical thinkers.	1. I H; II H; III F; IV F; V E; VI F; VII G; VIII; IX B	1. Lectures, discussions, student projects
2. To teach the mode of rational inquiry.	2. The student should be able to state the various features of an argument and their interrelationship.	2. II B-E; III B-E; IV; V B, C; VII	2. "
	The student should be able to a) form her/his own arguments b) weigh their likelihood	VIII, VI, (and II-V)	Student project. Lecture, discussion
3. To show how these modes of inquiry are interrelated.	3. Students should see (the argument) that the mode of rational inquiry is itself ethical.	3. IX	3. Article by Karl Poppe

OTHER:

3.2 Criteria Related Goals: Criterion: **Aesthetics** of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. "Beauty is truth, truth beauty...." (Keats, 'Ode to a Grecian Urn')	1. Students should be able to demonstrate the beauty of mental processes in their oscillation between particulars and generalizations; and the inevitability of the reasoning process has its peculiar beauty.	1. IV.	1. Lecture, discussion and text
2. Ethical theories, when elegant (simple, yet all-encompassing) are aesthetic.	2. Students should at least grasp the idea (if not have the aesthetic experience!)	2. III F; VII G; IX	2. Lecture, discussion, Popper Article.

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. A crucial connection exists between the reasoning process, social concern and the ability to create a better society.	1. Students should demonstrate awareness of this (claim). Students should able to apply reasoning skills	1. Entire outline, but especially IV F, I B, IX	1. Lecture, discussion, student project
	-to see the implications of others' arguments	II E 1 and 2	
	-to construct valid counter-arguments	II, III, IV, and especially VIII	
	-to be able to 'sniff out' the ethical implications of arguments, claims and to have an on-going interest in doing so long after the course is over.	VI A 3, II F	

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1a. To go beyond the basic understanding of meaning of an argument to the structure of the argument.	1. Students should be able to state an author's: a) explicit claims and how they function in the argument b) non-explicit claims (hidden assumptions, inferences, when these are not made clear.)	1. II B-E; IV; VII; III D; II E 1 and 2	1a. Text, reading assignme and critique of other student projects
b. To get practice reading and writing on ethical issues in the light of the above.	Writing: Students must do exercises on the board. They must write homework assignments (approx. 1 per week, 1-2 pages long) They must write essay examinations. They must complete a 4-6 page argumentation project on an ethical issue.		b. In-class practice. Homework assignment. Examinations. Student project.
	Reading: Students must read the text and various long articles.		c. Homework assignments.

OTHER: Basic college-level reading and writing skills are pre-supposed in this course. Students who do not pass a literacy examination during the first week are strongly encouraged to get tutored or to wait until the following semester to take the course.

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. The major goal of the course is to teach critical and effective thinking over a broad range of ethical and social issues.	1. By succeeding in the course, the student should emerge a more critical and effective thinker, at least in the area of ethics, at most in many other academic disciplines.	1. The entire course outline	1. Lecture, discussion and video tape (The Case of the Ancient Astronauts), text and articles. Student project in ethical argumentation.

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To show that good ideas are valid and creative.	1. The students will be able to express: a) appreciation of the creativity of others' arguments in the field of ethics.	1a. II H; III F; VI F; VII G	1a. Lecture, discussion.
	b) pride and a sense of accomplishment in the creativity of their projects	b. VIII	b. Student projects.
	c) the important claim that crativity in reasoning and ethics exists worldwide.	c. I A, B; VI A 3	c. Lecture, video-tape

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that Have an Impact on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. Both ethics and the reasoning process tend to move away from the trivial and incidental towards a more general, social perspective.	1. Students will be able to describe: the perspectives and experiences relevant to homosexuals, the elderly, immigrants, the disabled, even animals and trees! Analogies will be drawn with other groups, and student projects will be encouraged which are different from the above (i.e., projects on ethnic and women's concerns.)	1. VI E; VII B, F, V D VIII	1a. Lecture, discussion, articles. b. Student projects

OTHER:

3.3 Other Goals and Objectives

GOALS	OBJECTIVES
To make the course interesting and humorous whenever possible.	To get the students to laugh.
To foster happy inter-personal relationships among the students.	To have each student get to know every other student in class by name and 'sit with a stranger' during every discussion.

4. Texts and Other Instructional Materials

Required Textbook:

Applying Ethics: A Text With Readings, Vincent Barry

Reasons & Arguments, Gerald M. Nosich

Other Instructional Materials:

Various articles, the longest of which are:

"Ethical Reasoning" (Ch. 17), from *An Introduction to Reasoning*, by Stephen Toulmin, Richard Rieke & Allan Janik

"Oracular Philosophy and the Revolt Against Reason," from *The Open Society and Its Enemies*, by Karl Popper

5. Evaluation and Grading Plans

EVALUATION PLAN

By week 3, a 'pretend' quiz, which is gone over in class to help students evaluate their study needs.

Three 'real' quizzes, at the end of weeks 4, 8 and 12, worth 20 points each.

The Student Project will be worth 30 points.

Attendance and that elusive quality, 'participation', will be worth 10 points.

Total: 100 points.

GRADING PLAN:

Grades will not be on a curve, but will reflect student performance vis a vis the points.

88 - 100% = A
75 - 87% = B
62 - 74% = C
50 - 61% = D
0 - 49% = F

6. Course Policies

Attendance: Students are, of course, expected to attend, and will get points for doing so.

If a student does not attend, she/he must get notes and the assignment from another student.

Fees: None

Materials: Text (purchased by the student); handouts

Field Trips: None

Projects: Students are required to construct arguments pro and con a current ethical issue of their choice, and to indicate the features of their arguments in the margin (e.g., 'conclusion', 'issue', 'inference', etc.). The paper should be from 4 to 6 pages long and must be type-written.

Exercises to assess student's reading and writing abilities will be administered at an appropriate time during the first weeks of class. Where appropriate, students will be referred for assistance by the class tutor or other resources.

2.5 Language Arts

2.5.1 Language Arts 30LS: The Nature of Literature

2.5.2 Language Arts 35LS: Mass Communication

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: LANGA 30LS

The Nature of Literature

Course Author(s): Ross MacDonald, Jay Cameron,

Pablo Gonzales, Judy Bank

1. CATALOG DESCRIPTION

Title of Course:	The Nature of Literature
Course Number:	Language Arts 30LS
Unit Value:	3 units
Mode of Instruction:	Lecture

Brief Description of the Course:

The course intends to stimulate an enduring awareness of and respect for literature based on (1) the student's discovery of literature's insights into and reflections of individuals, societies, and cultures; (2) appreciation for the creative and technical processes inherent in the production of a creative work, especially in written form; and (3) development of critical thinking processes necessary to appreciate and assess the influence of specific and creative language use. Directed class discussions and rigorous reading and writing assignments provide opportunities for students to develop critical skills and learning associated with the study of literature.

Articulation Statement:

The course is intended for transfer to a four-year college or university and meets LMC's general education requirement in Language Arts.

2. OVERVIEW and RATIONALE

Overview

The Nature of Literature is organized and taught as a general education course within Language Arts. Six interweaving elements, or "threads," comprise the bulk, or "fabric," of the course. Of primary importance among the six "threads" is the study of literary genres. Literature is classically divided into categories of type of creative work: essay, poetry, short story, drama and novel. Awareness of the conventions of these forms and the demands on the audience is crucial to any beginning study of literature. The other five threads woven into the course enhance the study of these genres. Students need to be aware of areas of insight and inquiry. They need to wrestle with the sometimes conflicting forces of common experience and diverse perspectives found in literature. They need to be exposed to the creative process whereby language generates experiences. Their critical, evaluative, and creative thinking processes need to be challenged and expanded through the study of literature. The final "thread" is the integral importance of reading, writing, and discussion skills to the study of literature. The skillful interweaving of these threads intends to stimulate students' enduring awareness of and respect for literature and to give them critical and creative tools to enhance and enrich the quality of their lives.

Rationale

Inquiry into the relationship between the creative use of language and the formation, confirmation, and questioning of perceptions, insights, and attitudes is critically important in the development of a generally educated person. Nature of Literature intends to prepare students to make this inquiry. In assisting students with this inquiry, the course incorporates the central concerns of the intradisciplinary family of language arts into specific study of the creative use of language and its influence on one's thinking. Central to study in language arts are the following goals: understanding the creative process, seeing the relationships between form and function, developing critical thinking skills, developing awareness of plurality in experiences, perspectives, and values, and focused attention to improving reading and writing skills. Attaining these goals promotes student's abilities to effectively use language rather than to be used by it. Also of central concern to the discipline and the course is the enrichment which comes to our lives through increased exposure to aesthetically beautiful works and an increase in the ability to be pleased by them.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Study of literary genres

  A. The following five genres will be covered:

    1. Short story
    2. Poetry
    3. Essay
    4. Novel
    5. Drama

  B. Inquiry into genres includes the following issues:

    1. Characteristics of the form
    2. Examples of the form
    3. Relationships between form and function

      a. demands on audience
      b. limitations and advantages of the form in relation to its function
      c. the means by which form and function interact in the formation of a whole work

II. Awareness of areas of insight and inquiry

  A. Psychological perspectives

    1. Identification of motives, insights, and behaviors described or characterized in literature
    2. Attempts to relate motives, insights, and behaviors in literature to those experienced by student

  B. Sociological perspectives

    1. Identification of blending or conflicting norms and values within and between groups

      a. as presented by authors who are members of specific groups
      b. as perceived by readers who are members of specific groups

    2. Analysis of the literary portrayal of characters of certain groups and their conflicts with members of other social groups

3.1 Course Content Goal, continued

C. Historical perspectives

1. Relationship of a work to the time and place in which it was produced
2. Relationship of one's interpretation of a work to the historical time and place in which the interpretation occurs

D. Philosophical Perspectives

1. Ethical perspectives

    a. Standards of "right" and "wrong" presented in literature and employed by readers of literature
    b. Degree of relativity of "right" and "wrong"
    c. Role of exceptions

2. Metaphysical

    a. Questions regarding universal forces and deities.

III. Understanding of commonality and diversity of interests and experiences among people presented in literature

A. Some common interests or themes

1. Birth
2. Death
3. Love
4. Jealousy
5. Conflict with individuals or societies
6. Triumph
7. Defeat

B. Cultural diversity

1. Depiction of experiences of individuals or groups in conflict with or different from the traditional or dominant society or culture

    a. Examples should include:

        1) Black, Raza, Women's, Native American experiences as depicted in literature
        2) Works by Black, Raza, women, and Native American authors

C. Relationship of diversity to commonality

1. Representative question:

    a. to what degree do the common themes (III. A. 1-7) underlie literary recreations of experiences which seem diverse?

3.1 Course Content Goal, continued

IV. Awareness of the writer's craft as a creative process using language as a medium

A. The creative process

1. Perception
2. Collection
3. Selection
4. Structuring
5. Creating
6. Evaluating

B. Characteristics of successful creating

1. Discipline
2. Sensitivity
3. Hard work
4. Familiarity with variety of traditions
5. Mastery of technique and medium
6. Public accessibility

C. Relationship between creative process and success

1. Questions such as the following:

    a. Relationship of "greatness" of a work to public acceptance
    b. Why are some writers not successful until after their death, others only during their lifetime, others both?

D. Literature as distinguished from other creative arts

1. Creative arts may be defined as the dramatic, selective recreation and interpretation of human experience

    a. literature
    b. art
    c. music

2. Literature is distinguished from art and music by its medium: language

    a. intradisciplinary family of language arts is concerned with the relationship between thought and language

E. Language and Literature

1. Literature's building blocks are words
2. The impact of a work is traceable to the selection and sequencing of words
3. Mastery in selecting and sequencing words can:

    a. persuade, dignify, elevate, satirize, beautify, expose, etc.

3.1 Course Content Goal, continued

    4. Literature, through the use of words, is a communicative act
        a. sender encodes an idea
        b. receiver decodes
        c. language is the code

V. Development of critical,evaluative, and creative thinking processes

- A. Importance of critical vocabulary
    - 1. Examples:
        - a. theme
        - b. narrative
        - c. structure
        - d. character
        - e. plot
        - f. point of view
        - g. style
        - h. tone
        - i. image
        - j. metaphor
        - k. symbol
        - l. denotation
        - m. connotation
        - n. ambiguity
        - o. rhythm
        - p. sound
    - 2. Relationship of critical vocabulary to one's ability to share reactions to literature.
- B. Tension between established views and individual views on the quality or value of specific works
    - 1. Possible resolutions of one's right as an individual to choose and evaluate works and one's obligation as a student to increase critical awareness skills
    - 2. Example questions:
        - a. when you say you like a work, how do you know it doesn't have major flaws which you haven't learned to identify? With this concern as a given, is it still "permitted" to "like" a work?
- C. Creative Thinking
    - 1. Metaphorical thinking - The striking correlations between elements which at first appear dissimilar.
        - a. generalizability of metaphorical thinking
            - 1) for studying literature
            - 2) for creative problem solving
                - (a) For example: use of analogies, anecdotes to clarify problems or ideas.
    - 2. Projective Thinking - "What if....?"; the literary version of scientific hypothesizing
        - a. projection of self into literary characters and situations
        - b. formation of inferences regarding author's motives, attitudes, world-view
        - c. projecting into future or hypothetical events

3. Synthesis of thought
    a. view of a work as more than a collection and summation of its parts
    b. integration of seemingly opposing elements of a work
        1) Example question: how do you reconcile the opposing images of fear and warmth in "My Papa's Waltz?"

VI. To utilize reading, writing, and discussion skills as a central focus of the course

A. Reading

1. Literature is primarily presented through extensive reading assignments from genres and from a variety of authors with special attention to a balanced presentation of minority and women's concerns.

2. Students will sometimes read each other's critical papers.

B. Writing: the following forms of written expression are integrated into the course:

1. formal essays
2. informal reaction papers

C. Discussion

1. Class discussion will encourage students' development of their ability to present opinions and explain ideas in oral form.

D. Tutoring

1. An informal screening of reading and writing skills will be administered within the first two weeks of the course

2. As necessary, students will be strongly encouraged to seek tutorial assistance

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Family of Language Arts

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Develop an appreciation and understanding of literature as an art form.	1. To define art form as a class and literature as a particular sub-class.	All of IV.	See Course Policies Example of how these objectives would be operationalized:
2. Comprehend basic communication processes.	2a. Define sender, receiver, encode, decode. b. Explain the process of communication using these terms		1. In-class writing on "What is literature? How is it different than and/or similar to music, art, television?
3. Understand the relationship between form and function.	3a. Define form and function b. Explore relationships between form and function.	I. B	2. Brief lecture presentation. 3. Class discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Modes of Inquiry Incorporated Withing the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Introduce students to the following key modes of inquiry in language arts: a. literary analysis b. literary synthesis c. literary evaluation	1a. (1) Identify key concepts used to discuss literary works.	V. A. 1	See course policies Examples: 1.a.(1) Ask students to keep a personal glossary of literry terms; OR refer students to glossary in textbook. 1.c. Class discussion on the following question: "When is one's evaluation of a work not acceptable?"
	1a. (2) Demonstrate the use of these concepts in discussion of literary works.	V. A. 2	
	1b. (1) Discuss the impact and significance of specific works	V. C III. A, B	
	1b. (2) Discuss possible relationships within and between works	V. C III. A, B	
	1c. (1) Understand the subjective nature of evaluative criteria	V. B	
	1c. (2) Be aware of diversity of critical perspectives	II.	
	1c. (3) Develop a personal, defensible critical perspective	III. C V. C	
2. Introduce students to the creative process.	2. Identify key stages in the creative process.	IV. A.	Discussion and/or handout (see Creativity Criterion)

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Develop a broader appreciation and acceptance of art and beauty in literature.	1a. Be able to recognize and comment on specific passages which a student considers to be particularly effective or beautiful	IV. E	See course policies. Example procedure: 1.a. In-class writing assignment on this question: "Choose one line from Sylvia Plath's 'Daddy' which you consider to be particularly effective and explain why."
	1b. Express an integration of one's own judgments and values and acknowledged principles of art and beauty.	V. A, B	1.b. See instructional procedures for 1.c. on Modes of Inquiry

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore these Implications of the Knowledge of the Discipline; Values, Ethics, Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Through literature, encourage the learner to explore these implications of knowledge: values, ethics, future.	1a. Examine individual and group concepts of right and wrong.	II. B. 1 II. D	See course policies. Example question for discussion or in-class writing: "Many of you have stated that it is wrong for an author to write in a way which you consider obscure to the general public. Why? What is your justification?"
	b. Explain the role of exceptions. The role of relativism in right and wrong.	II. B. 2 II. C, D III. B	
	c. Express personal opinion regarding current directions of literary expression.	III. B	
	d. Discuss the degree to which literature is obligated to reach an audience.	IV. B, C	

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Processing and Reporting Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To provide opportunities for learners to develop higher cognitive skills through reading creative works, discussing them, and writing about them.	1a. Write formal essays, of satisfactory quality, of 500-750 words each, evaluating or analyzing one or more literary works.	VI. B	Assign formal essays
	b. Respond to works in short, informal reaction papers.	VI. B	Assign short in-class reaction papers
	c. Critically read various genres of literary works	VI. A	Assign readings
	d. Respond to other students' formal and informal written assignments.	VI. A	Allow students time to read papers to each other.
2. To develop students' reading and writing skills.	2a. Know how his/her reading and writing skills compare to the levels anticipated for course success.	VI. D	Reading/writing assessment
	b. Understand the value and availability of tutorial assistance.	VI. D	In-class presentation regarding tutorial program supplemented by periodic reminders thereafter.

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To help students develop creative problem-solving techniques and attitudes.	1. Define metaphoric, projective, and analytic thinking.	V. C	See course policies. Example procedures: 1. One page handout with terms and definitions. OR 1. One page handout with terms and no definitions.
2. To foster independent thinking.	2. Discuss and define his or her individual assessment of literary works.	V. B	
3. To acquaint students with the importance of mastering concepts and terms which denote them.	3a. Define specific terms used in literary analysis.	V. A	3a. As above - or - See Modes of Inquiry, Instructional Procedures, 1.a.
	b. Explain the value of the use of terms.	V. A	

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce Learners to Creative Processes and Examples of Human Creativity

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Understand the creative process.	1. Identify elements of the creative process.	IV. A	See course policies. Example procedures: 1. Lecture or discussion or in-class writing; "What are the elements in the creative process?" 2. Same as #1 above with this question: "What is the relationship between success and creative processes. 3. Written or videotaped interviews with literary figures.
2. Explore relationship between success and creative process.	2. State a relationship (or lack of it) between success and the creative process.	IV. B, C	
3. Explore the role of language in creativity.	3a. Explain how literature differs from other creative processes.	IV. D	
	b. Discuss specific words, phrases, and sentences used by authors as examples of the creative process.	IV. E	

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives Experiences, and persuasions that Impact Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Through literature, encourage the learner to consider varieties of perspectives, experiences, and persuasions impacting society.	1a. Specify several major authors, works, and themes from various ethnic groups.	III. B	See course policies. Examples: 1a. Discussion or in-class writing on the question: "What basic human experiences does Jose Angel Gutierrez convey in the poem '22 Miles'?"
	b. Specify works which speak to his/her own concerns.	II. D. 2 III. A, B	
	c. Identify common themes of birth, death, love, etc.	III. A	
2. Increase students' awareness of and tolerance for pluralism.	2. State and define personal opinion regarding relationship between the commonality of interests in literature and diverse concerns reflected in works by women and ethnic minority writers.	III. C	2. Follow-up question again for discussion or writing, "Is this an experience and a feeling particular to the Raza ethnic group?"

OTHER:

4. Texts and Other Instructional Materials

Required Textbook:

One of the following anthologies will be used:

The Essential Self. Berry

Norton Introduction to Literature. Bain, Beatty, Hunter

Literature: An Introduction to Fiction, Poetry, Drama. Kennedy

Each semester, instructors who will teach this course will collectively discuss the Bibliography of works to be used by each.

Recommended Text(s)

To be selected

Other Instructional Materials:

Journal articles

Primary Sources

Contemporary Media

Supplemental Handouts

Films

Lectures

Video tapes

5. Evaluation and Grading Plans

EVALUATION PLAN

Frequent evaluation, both formal and informal, will be provided as an attempt to promote student learning and reinforce the major components of the course. Some opportunity for rewriting may be provided.

Formal written midterm examination and final examination will make up a major portion of the grade. Attendance, participation, in-class writing assignments and quizzes will also figure in determination of the students' final grade. An item-by-item percentage break-down will be provided in the course handout for each section of the class.

GRADING PLAN:

These criteria in weighted proportion to be determined by instructor will determine the course grade. The following is the grading scale:

A = 90 - 100%

B = 80 - 89%

C = 70 - 79%

D = 60 - 69%

F = below 60%

6. Course Policies

Attendance is required. Opportunity for field trips will be optional. Written work will be required and is to be turned in on time. It is expected that students do all required reading in time to participate in class discussions.

Students will also be required to take the reading-writing screening device and, when appropriate, will be strongly encouraged to seek tutorial help.

As is suggested by the fact that each criterion refers the reader to Course Policies, this section is a very important component of the Course Outline. It's seldom possible to specify exactly which combination of instructional procedure and material must be used to meet specific objectives.

In cases where certain procedures and materials are necessary, they have been made explicit. In the other cases, illustrative examples have been provided. It is the course policy that lecture, discussion, in-class writings, and other instructional activities are each valuable classroom procedures. A balanced integration of these procedures is prescribed as course policy.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: LANGA 35

Mass Communication

Course Author(s): Dick Livingston

For full and part-time language arts instructors.

1. CATALOG DESCRIPTION

Title of Course:	Mass Communication
Course Number:	Language Arts 35 (previously Journalism 5T)
Unit Value:	3 units
Mode of Instruction:	Lecture/Seminar

Brief Description of the Course:

Designed to provide the student information on the origins, development and present role of the major mass media: magazines, newspapers, radio, television and cinema. Course explores current and future trends in mass communication and issues and ethics involved with the mass media.

Articulation Statement:

Meets LMC's general education requirement in Language Arts.
Transfers to UC, CSUC (Gen. Ed. area C)

2. OVERVIEW and RATIONALE

Overview

Mass Communication is a general education course designed to improve students' ability to "consume" modern mass media wisely. The course, designed for the typical student (not necessarily journalism or communication majors), relies extensively on direct media experience, in addition to more traditional classroom methods. Mass Communication is a Language Arts GE course, related to the other option, literature.

Major goals and objectives include: introduction to communication theory and its relationship to mass media; relationship of media form and function; media as the "literature of the 20th century"; evolution of the mass media in the U.S.; trends toward media specialization; evaluation of the media's information role; cultural pluralism and the mass media; media role in formation and transmission of popular culture; criteria for evaluating the mass media; media as big business; the First Amendment and various conflicting rights; economics of the mass media; role and influence of advertising; various media-related ethical issues; the future of the mass media. "Experiential learning" through direct media exposure is used to help students achieve the objectives.

Rationale

Americans are "media freaks" - the typical American adult is now directly exposed to the mass media 50 hours each week. That's quite a habit. Although the media pervade our daily lives, most people are relatively unaware of this "invisible environment" and its impact on us. Our habits, daily routines, perceptions of ourselves, society and the world - all are influenced significantly by mass communication. Information flows through the mass media in vast quantities; it is difficult to sort out and separate the worthwhile from the worthless, the truths from the untruths and half truths. But the range of freedoms and the quality of life in this society depend to a considerable degree on the alternatives we select. This course will help students to choose wisely and become aware of the forms and impact of the mass media. The power of language has been vastly increased by the mass media; for many Americans, media content has become their prime exposure to literature. It is therefore appropriate to study mass communication in Language Arts.

The course presents the "content" of Mass Communication and teaches the criteria of LMC's general education program:

- The intradisciplinary relationship of mass communication to the language arts.
- The modes of inquiry of mass communication as one of the language arts.
- Aesthetics of language arts as presented in the mass media.
- Ethics and values issues of mass communication.
- Reading/writing skills; analysis of media effects on those skills.
- Critical and effective thinking.
- Creativity in the mass media.
- Pluralism as reflected in the media.

A well-educated person in the last two decades of the 20th century needs to understand some of the complexities of the mass media which pervade our daily lives.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Introductory Concepts

a. Communication theory as reflected in mass media; intradisciplinary concepts.
b. Pervasive influence of mass communication in modern America
c. Four major media functions - information processing, opinion formation, economic function, entertainment; critical evaluation.
d. Brief introduction of GE criteria as reflected in mass media.

II. Evolution of the Mass Media (history)

a. Early concepts of freedom of the press; ethics.
b. Press in the 1800s; changes as a reflection of societal changes, technology, evolution toward big business, increase in media power and influence
c. Yellow journalism (Hearst, Pulitzer); Spanish-American War; ethics
d. The Muckrakers, then and now; ethics.
e. Press coverage of the two world wars; public's right to know vs. national security issue; ethical implications.
f. Early days of radio, television; increasing impact of broadcasting

III. Print Media: Magazines

a. Changing magazines: trend from mass to specialized; implications; demographics and profits; pluralism and implications.
b. The "opinionmakers" - role of modern news magazines; biased, slanted coverage; power of the medium; ethics.

IV. Print Media: Newspapers

a. What's news? Journalistic mode of inquiry.
b. Strengths/weaknesses of daily newspapers
c. Newspaper industry today (chain store journalism, decline in competition, move toward soft news, economic realities, readership patterns, etc.); ethics
d. How the news gets into print; technological change; intradisciplinary concepts and inquiry.
e. Bias in news coverage; ethical implications.
f. Minority press; pluralism.
g. Underground press; rise, fall - implications
h. Development of criteria to evaluate newspapers; application to Bay Area papers; inquiry mode.
i. Role of community newspapers (usually local editor as guest speaker)

3.1 Course Content Goal, continued

V. Electronic Media: Radio

a. Changes in radio in 50s: influence of TV, rise of DJ format, payola scandal, radio's role in shaping popular culture, ethics
b. Status of radio today: fragmentation (format, sound), FM revolution, minority radio; pluralism.
c. Student-designed radio station exercise involving critical thinking and creativity.

VI. Electronic Media: Television

a. Pervasive influence of TV; feelings about the medium; some "expert" opinions
b. Television as "popular culture"; literary/media analysis of television; application through written TV review; aesthetics.
c. Organization of television industry; form/function; format
d. TV as big business; ratings; effect on programming; ethics
e. Influence of television on children: kudos and criticisms; ethics; what could/should be done
f. Television news coverage: strengths and weaknesses; sensationalism; alternatives
g. Television's influence on the political process; ethics.
h. Three major criticisms: violence, sexism, racism; ethical implications and pluralism.
i. Public television as an alternative; other alternatives and technological change

VII. Motion Pictures

a. Status of movie industry today; creativity and aesthetics
b. Film censorship and pornography; conflicting rights and ethical analysis

VIII. Government/Media Issues

a. Major government/press conflicts; limits on freedom of the press; ethics.
b. Conflict: public's right to know vs. government's need to protect national security; ethics.
c. Case study in conflict: Watergate
d. Conflicting rights: free press vs. fair trial; critical analysis of solutions.
e. Source protection dilemma (ethical analysis included in each issue)

IX. Economics of the Mass Media

a. Media ownership patterns: move toward concentration; implications and ethics
b. Advertising; strengths and weaknesses; manipulation; creative and aesthetic aspects; role of language; formation of popular culture; ethics; what can be done.
c. Access to channels of mass communication; critical analysis.

X. The Future

a. Application of concepts to future; technology; control (individual and societal); implications.

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. Develop an appreciation and understanding of the functions and power of language.	1. To define mass communication as a form combining aesthetics and language.	I. a,b,c III. b IV. e	Lecture/discussion. Various media exposure assignments, such as TV review, ad critique, news bias exercise.
2. Comprehend basic communication processes.	2a. Define sender, receiver, encode, decode, feedback. b. Explain the process of communication using these terms.	I. a, c	
3. Understand the relationship between form and function.	3a. Define form and function b. Explore the relationships between form and function.	I. a,c II. b,f III. a IV. d V. a,b VI. c IX. c X. a	

OTHER:

3.2 Criteria Related **Goals**: **Criterion**: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
To examine the aesthetic qualities of the mass media.	Describe and explain the role of aesthetics of the mass media.	I. a, c III. b IV. h V. a VI. b IX. b	Lecture/Discussion Readings; writing assignment, such as TV review, advertising critique.
	Develop and apply criteria in written form for evaluating media aesthetics.	IV. h V. c VI. b IX. b	
	Experience some of the aesthetic aspects of mass communication.	Throughout course	Films, such as "Good-bye, Billy" and "Sixty-second Spot" Readings

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
Present some of the values/ethics issues of mass communication.	Describe and evaluate complex mass communication ethical issues; arrive at own conclusions, based on values.	II. a, c, d, e III. b IV. c, e, f, h V. a VI. a, b, d, e, f, g, h VII. b VIII. a-e XI. a, b, c	Lecture/Discussion Small groups; Writing exercises; Films, such as "Mightier Than the Sword," "Electric Flag," "Free Press vs. Fair Trial," "Business of Newspapers," and "Media Massaging the Mind;" Readings.
Look at the future of the media, based on present situation and trends.	Apply present situation and trends to future of mass media.	X. a	Lecture/Discussion; Film, such as "Media Massaging the Mind."

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
Provide opportunities for learners to develop higher cognitive skills through reading and writing about mass communication/media.	Read and understand text and "typical" media excerpts.	Throughout course	Reading assignments; text, articles.
	Write "college level" short papers and essay exams.	"	Reaction papers; Short papers (take home, in-class); Essay questions on all unit exams and final.
	Describe relationship of reading, writing to the communication process.	I. a	Reading, lecture
	Analyze effects of media on reading/writing skills.	I. a II. b IV. c VI. b, e	Reading, lecture, discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
Provide opportunities for learners to enhance their effectiveness in critical and effective thinking by studying mass media and related issues.	Develop and apply criteria for critically evaluating mass media performance.	I. c III. a, b IV. b, e, h V. a, b, c VI. a, b, d, e, f, g, h	Discussion; reading; lecture; media exposure exercise, such as TV sexism/racism; writing (for ex., ad critique and/or reaction to ethical dilemma.)
	Understand, evaluate and arrive at a conclusion about media issues; report conclusions clearly (verbal, written) Similar to approach used in HST 2LS.)	II. c, d, e VI. h VII. b VIII. a, b, c, d, e IX. a, b, c	Same as above

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
Introduce learners to creative processes and examples of human creativity as reflected by the mass media.	Understand, experience and appreciate human creativity in the mass media.	I. c II. f III. a IV. b, c V. a VI. a, b, c, d, e VI. 1 VII. a, b IX. b	Films, such as "Sixty-second Spot;" readings; discussion; lecture; TV viewing exercise and written review; ad critique.

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
Encourage the learner to consider the variety of perspectives, experiences and persuasions in American society as reflected in the mass media.	Discuss and evaluate various issues involving women and the mass media.	III. a IV. c VI. h VII. b IX. b	Readings; lecture, discussion on minorities in journalism and role of minority press; paper on TV racism/sexism; discussion of sexism in advertising; ad critique; discussion of sexism in films and relationship to issue of pornography
	Describe and evaluate various issues involving various ethnic groups and the mass media.	II. b, f III. a IV. f V. b VI. d, h VII. a IX. b	

OTHER:

3.3 Other Goals and Objectives

GOALS	OBJECTIVES
Introduce students to the concept of the "pervasiveness" of the mass media in America.	Understand the pervasive nature of U.S. mass media and be able to relate the concept to one's own life.
Introduce students to the history of the mass media in the U.S.	Understand how the mass media evolved in America and how that evolution relates to the present situation and possible future courses.
Understand the four major media functions.	(List and explain) the four major media functions and understand how they are interrelated.

4. **Texts and Other** Instructional Materials

Required Textbook:

Pember, Don.	Mass Media in America. Chicago, Science Research Associates, 1981
Reading(s)	Various handouts from newspapers, magazines
Media	Various films* - recent videotapes
Other:	

Recommended:

Text(s)

Reading(s)

Media

Other

*Example of films used Fall, 1982:

History unit: "Mightier Than the Sword" - "Goodbye, Billy"

Newspaper unit: "First Edition"

Radio unit: "Is Everybody Listening?"

TV unit: "TV Guide" - "Electric Flag"

Government/media unit: "Free Press vs. Fair Trial"

Media economics unit: "Business of Newspapers" - "Sixty-second Spot"

Future: "Media Massaging the Mind"

5. Evaluation and Grading Plans

EVALUATION PLAN

Students will be evaluated by: exercises and short papers, three unit exams and a final examination.

The unit exams and final exam will contain both objective and essay questions. Questions will be based on both reading assignments and class activities.

GRADING PLAN:

Grades will be calculated approximately as follows:

Short papers and exercises, quizzes: 15%

Unit tests: 50%

Final examination: 35%

GRADING:

Points will be kept; final grades will be distributed approximately as follows:

89 - 100% - A

79 - 88% - B

67 - 78% - C

55 - 66% - D

0 - 54% - F

6. Course Policies

State course policies, such as attendance, fees, materials, expectations regarding such activities as field trips, practicum, projects, and the like.

Attendance/participation: Since certain in-class activities cannot be made up and are important parts of the course, students are expected to attend regularly. Attendance may be used as a factor in determining final grades for students on "border" between grades.

Reading/writing assessment: A simple exercise to assess students' reading and writing abilities will be administered sometime during the first two weeks of class. Students with difficulties will be referred to the class tutor for assistance.

Reading: Students will need to keep up on assigned readings, since much of this material will not be covered in class. A study guide with questions designed to aid in understanding the reading and preparing for exams will be provided for most units. Students will be expected to read about 375 pages from the text during the semester, as well as several handouts for each unit.

Other: Occasionally students will be required to complete some outside media-related activity. Examples: find newspaper articles with bias; review TV show; critique advertisements.

2.6 Social Science

2.6.1 Social Science 10LS: An Economic View of Society

2.6.2 Social Science 21LS: Geography

2.6.3 Social Science 32LS: United States History

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: **Social** Science 10LS

An Economic View of Society

Course Author(s): Bob Marshall

For full and part-time social science instructors.

1. CATALOG DESCRIPTION

Title of Course:	An Economic View of Society
Course Number:	Social Science 10
Unit Value:	3 units
Mode of Instruction:	Lecture

Brief Description of the Course:

An examination of economic factors, primarily microeconomic in nature, which influence contemporary society, including supply and demand and prices, environmental problems, concentration in industry, unions, and governmental regulation. A brief consideration of macroeconomic theory dealing with fiscal and monetary policies, inflation and unemployment.

Articulation Statement:

2. OVERVIEW and RATIONALE

Overview

"An Economic View of Society" will cover:

Economic decisions (what to produce, how to produce, who gets the produce) and the ways (tradition, market, and government) these decisions are made.

How supply and demand, according to classical microeconomic theory, are supposed to set a price that eliminates surpluses and shortages and motivates the members of society to provide the desired goods and services.

Institutions, especially government, oligopolies, and labor unions that inhibit free market functions and the pros and cons of such constraints.

Macroeconomic concerns including the impact of government taxes and government expenditures and monetary policy and their impact on gross national product, inflation, and unemployment.

Rationale

Economics is usually divided into a microeconomics course dealing with the determinates of prices for individual goods and services and a macroeconomics course dealing with government fiscal (taxes and expenditures) and monetary policies impact upon overall or aggregate levels of output, employment and prices. Complex techniques, subtle distinctions, graphs, and quantitative analysis are included whereas daily applications in the news and possible societal implications are usually minimized.

This course, seeking to achieve the general education objectives, will introduce both the microeconomic and the macroeconomic model. But in the place of sublties, graphs, and numbers it will focus on using the elemental models to understand the daily operation of our society and the implications of pursuing various policies. Thus, the student should come to feel they can independently, yet intelligently, understand the events and vote in the elections occurring in their society. Since political and social institutions will be considered, the course will be interdisciplinary in nature. Traditional capitalist, and communist societies will be examined and data for men and women and blacks and whites will be utilized so a pluralistic perspective will be achieved. The course will involve less material and more process to facilitate the development of reading, writing and thinking skills.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. Economic questions and answers

- A. Economic Questions
  1. What to make
  2. How to make it
  3. Who gets it
- B. Tradition's answers (Eskimos as an example)
  1. Scarcity makes answers unavoidable
  2. Role of location, culture, technology and capital
  3. Advantages and disadvantages
  4. Traditional culture's demise
- C. Market's answers (United States as an example)
  1. Historical origins in Industrial Revolution
  2. Theoretical Framework - Adam Smith
  3. Advantages and disadvantages
- D. Government's answers (Russia and China as examples)
  1. Historical origins in 19th century capitalism
  2. Theoretical Framework - Karl Marx
  3. Advantages and disadvantages

II. Microeconomic Theory

- A. Demand and Supply
  1. Usefulness of economic models
  2. Graphs
  3. Demand
  4. Supply
  5. Price
- B. Price changes, shortages and surpluses
  1. Impact of shifts in demand or supply
  2. Impact of government price fixing
- C. Price elasticity: Changing prices affect on consumers

3.1 Course Content Goal, continued

III. Microeconomics in the Real World

A. Externalities (pollution) necessitating government regulation and effect on supply, demand and price.

B. Business's struggle to eliminate competition and manipulate supply, demand and price

C. Worker's struggle for power to manipulate supply and wages

1. Unions and their economic impact
2. Economic status of women, minorities, and teenagers

IV. Macroeconomics

A. The national economy: Measures of income, output, consumption and savings.

B. Government's rule as economic manager.

1. History of U.S. economic performance
2. Classical theory: Leave the economy alone
3. Keynesian theory: Call for government intervention

C. Monetary policy: The creation and manipulation of money

1. What is money
2. How do banks create money
3. What is the federal reserve
4. How does the federal reserve create money
5. Conflicting views on expanding money

D. Present situation

1. Causes of inflation
2. Causes of unemployment
3. Possible fiscal and monetary policies to cope with situation

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
To show the coherence and utility of the supply and demand and the circular flow models.	Be exposed to the supply and demand model and the circular flow models and their applicability and essential simplicity.	II. & IV.	Lectures, discussions, film: "Gross National Product"
To present the information necessary to grasp the ingenuity required to develop the models.	Be exposed to the human events and relationships the models sought to explain so the students might get an inkling of the analysis and imagination required to concoct the models.	I. C. 1 & 2 IV. B	Lectures

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future.

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
Consider the consequences of the passing of traditional cultures.	List what you feel are (were) the advantages and disadvantages of traditional cultures and indicate your feeling about their demise.	I. B. 4	Film: "Nanook of the North", discussion
Explore individual student's reactions to the merits of capitalism and communism as presented in theory and as practiced.	Examine the values/priorities you hold that help determine your judgements of capitalism and communism as presented in theory and as practiced.	I.	Film: "Dialectic Materialism", discussion
Present the impact of Smith's, Marx's, and Keynes' theory on subsequent events.	Discuss the impact an economist had on subsequent historical events.	I., IV., B, 3 IV. D	Lecture
Have students consider what should be done about large corporations and large unions constraints on the operations of the market.	Discuss why large corporations and/or unions might be undesirable in a market system and indicate what you feel should be done about their existance.	III. B & C	Discussion
Consider the trade off between inflation and unemployment and how values, and self-interest influence an individual's priorities.	Indicate whether you feel inflation or unemployment is more undesirable and analyze why you hold the view you do.	IV.	Discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Utilize data and insights from history to make students' understanding of economics theories and issues more accurate and vital.	1a. Describe conditions at time of Industrial Revolution and during 19th century in England.	I. C. 1 I. D. 1	Lecture and films: "The Market," "Meet King Joe".
	1b. Use macroeconomic theory to explain economic conditions in various decades in the 20th century.	IV. B. 1	Lecture
2. Same as 1 except political science	2a. Analyze the basis of power in Russia and China today.	I. D. 2	Lecture & Handouts
	2b. Explain why corporations and unions have tremendous political power.	III. B III. C. 1	Lecture
	2c. State how political considerations influenced the organization of the Federal Reserve.	IV. C. 3	Lecture
3. Same as 1 except geography	3a. Analyze locations impact on Eskimo society.	I. B. 2	Lecture and discussion
4. Make students aware that social science theories deal with and are based on, human events and interactions and therefore, generally cannot be proven in controlled laboratory settings.	4a. Recount the conditions that existed in England that lead to the creation of the supply and demand model.	I. C. 1	Lecture
	4b. Recount the conditions that existed in the United States during the depression that lead to the creation of the macroeconomic model.	IV. B	Lecture and discussion

OTHER:

3.2 Criteria Related Goals: **Criterion:** Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. Describe the two basic theoritical models (supply and demand and circular flow) into which economic data has been organized.	1. Be able to construct supply and demand graphs and drawn and explain the circular flow.	II. A IV. A, B, C	Lectures, graph exercises, role play
2. Use the above two models to explain/predict the consequences of specific economic policies.	2. Use the supply and demand graph to determine price, changes in price caused by new conditions and the impact of price on the consumers.	II. B, C IV. D	Lectures, graph exercises.

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
Assess reading and writing skills and make referrals to tutors as appropriate.	Individual student will undertake skill development as appropriate.	I. B	Reading and writing class exercise. Tutorial program.
Promote writing skills.	Write 20 minute response to each question shown as sub-goals under implications of knowledge and hopefully to 2-4 additional questions. (Shared but ungraded)	Throughout	Writing & discussion
	Write a page or longer essay explaining a current news article in greater depth using the concepts and data acquired in that particular unit.	At end of each unit	Homework assignments.
Promote reading skills.	Analyze organization of sub-chapters and paragraphs.	Throughout.	Discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
Promote attitudes and skills that contribute to effective and critical thinking.	Describe and practice operations in critical thinking; synthesis, analogy, deductive and inductive thinking and evaluation.	Throughout.	Small group and class discussion and writing.
Encourage independence in thinking.	Explore personal responses to independent thinking.	Throughout.	Discussion and role play.
	Locate an article or other material that relates to the concepts in a unit and write a page summarizing the article and pointing out why it supports or contradicts what they have learned in class.	Towards the end of each unit.	

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity.

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
Introduce examples of creativity by economists in their thinking and writing (i.e., "The Invisible Hand").	Be exposed to the human events and relationships the models sought to explain so the students might get an inkling of the creativity that went into the concocting of the models.	I. C. 1 and 2 IV. B. 1 and 2	Lecture, films: "The Market Economy", "Gross National Product"
Encourage in the learner creative activity.	Explore verbally and in writing attitudes and relationships in a non-judgment (ungraded) environment.	Throughout	Writing, discussion, role playing.

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
Explore the three ways to answer the economics questions and the merits and drawbacks of each.	Contrast the answers to the economic question given by traditional, market and planning systems.	I.	Lecture, writing, discussion, films: "Nanook", "The Market System", "Dialectic Materialism".
Examine the entrepreneur's and worker's role in, and likely preception of, a market society.	Constrast the entrepreneur's and worker's role and likely perception of a market society.	III. B. & C	Lecture, films: "The Corporation", "The Inheritance", role play, and discussion.
Examine the economic status of women, minorities, and teenagers and explain how and why they vary from the status of white male adults.	Compare and indicate some causes for discrepancies in income, unemployment, and education between adult white males and white adult females, minority males and females, and teenagers.	III. C. 2	Lecture, analyze tables, discussion.
Contrast conservative, liberal, and radical viewpoints.	Contrast conservative, liberal and radical's economic assumptions and their solutions to present problems.	I. C. 2 D. 2 IV. D. 3	Lecture, discussion and role play.

OTHER:

4. Texts and Other Instructional Materials

Required Textbook:

Philip C. Starr's Economies: Principles in Action

3rd Edition: Dale Sievert's and David Martin's
Study Guide For Starr's Economics

Recommended Text(s)

None

Other Instructional Materials:

Numerous contemporary articles taken from "Time," "Newsweek," "Business Week," "The Wall Street Journal" and other news and business publications will be distributed as handouts.

5. Evaluation and Grading Plans

EVALUATION PLAN

Students will take a scantron quiz each week on the chapter, associated sections in the study guide, lectures, and handouts of the previous week. At the conclusion of each unit they will take an exam consisting of essays, exercises where appropriate, and a 15 question scantron. (During the final exam period, they will have the unit 4 exam). During the final week of each unit, students will locate a current news article dealing with concepts covered in that unit and write a paper of a page or more explaining the economic processes relating to the event.

GRADING:

Grades will be based on total points accumulated on the work above. Although, up to 5 additional points can be given based on attendance and participation and 5 additional points on an extra write-up of a news article in unit four.

6. Course Policies

Generally a chapter in the text will be covered each week. Students will be expected to complete the sections in the study guide that relate to the chapters in the text and two or three questions on their weekly quiz will be taken directly from the study guide. If a student fails to take a quiz, it is their responsibility to take a make-up quiz within the first week they return to class. If they fail to do so they receive four points for the quiz. (Obviously, better than a zero but still a low F).

When each unit exam is returned, it will include the total points the student has thus far in the course and the letter grade their work thus far merits. Students with C grades or below and students with writing problems will be encouraged to work with the tutors.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Social Science 21LS

Geography

Course Author(s): Bob H. Marshall

For full and part-time social science instructors.

1. CATALOG DESCRIPTION

Title of Course:	Geography
Course Number:	Social Science 21LS
Unit Value:	3 units
Mode of Instruction:	Lecture and Field Practicum

Brief Description of the Course:

An examination of factors that determine environment and consideration of human relations with that natural environment. The rock cycle, mountain building and destruction, climate, soil, vegetation and animal life, will be covered. Hunting and gathering, agrarian, and industrialized societies relation to, and impact upon the land will be included. Thus the course includes concepts found in both physical geography (land forms' and locations' impact on climate and thus life) and concepts found in cultural and economic geography. Six field trips, most of them to East Contra Costa County, will be an integral part of the course.

Articulation Statement:

Transfers to U.C., C.S.U.C., and private colleges. Fulfills General Education requirements at L.M.C.

2. OVERVIEW and RATIONALE

Overview

Geography will cover:

The materials that make up the earth and the forces that build it up and tear it down.

The factors that determine climate, soil, vegetation, and animal life.

The land's impact on humans and human's impact upon the land.

The course will deal with many of the basic concepts included in physical, cultural and economic geography.

Six field trips, most of them to East Contra Costa County, will be an integral part of the course. While in the field, students will have opportunities to make observations and inferences, and come to understand and appreciate their immediate environment.

Rationale

Geography is usually divided into three introductory courses: physical, cultural, and economic. Since this is a general education course concerned with an overview, the course will draw from all three areas. Geography is, of necessity, intradisciplinary and this course will utilize material from history, economics, political science, anthropology, as well as from chemistry, physics, and biology.

2. Overview and Rationale, continued

Geography usually utilizes the lecture and reading modes to communicate a body of knowledge, almost encyclopedic in nature, concerning the entire world. This course, in seeking to achieve the general education objectives, will focus on the geography of East Contra Costa County and rely heavily on six field trips to the area in the hopes that the student will:

1. Become actively involved in the educational process: exploring the land using topographical maps, making observations and drawing inferences, and utilizing original documents to reconstruct the past.

2. Come to understand, experience, and appreciate their immediate natural environment.

3. Be exposed to the basic geographical concepts that shape all environments in spite of the significant differences in their appearances.

Thus the course will be student oriented rather than discipline oriented, it will be as concerned with process as it is with content thereby qualifying as a general education course. Still the fundamental concepts of the discipline will not be shortchanged since they are essential to gaining an understanding of the local environment. Even though other regions will only be alluded to for comparison, the student should be able to understand those diverse environments with little further study because the same fundamental geographic concepts apply.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

I. The Land

A. Space and Time

Location (which is geography's concern) influences the land, life, and human habitation, or put another way, the geology, ecology, and history of an area.

Given the age of the earth (over four billion years) and given that the changes that go on today have gone on throughout almost all that time (uniformism) the earth has been, and it is continuing to be, markedly transformed although usually at almost imperceptible rates. Geologic laws such as superposition and original horizontality enable a person to comprehend these transformations and deduce the geologic history of a particular site. Film: This Land.

B. The Rock Cycle

Any rock can weather and decompose becoming fragments of various sizes or ions in solution. These fragments or solutions can, in turn, become sedimentary rocks or, under more heat and pressure, metamorphic rocks or, under still more heat and pressure, melt to magma, or pass gradually through all these states. Molten magma can cool into igneous rock (rocks forms from a volcano for example). In turn, any rock can weather and decompose -- thus the rock cycle. The nature of a particular rock is determined by the processes it has been through and the chemicals of which it is composed. These processes and their outcome are, on the one hand, extremely simple and, on the other, extremely diverse and complex. Films: Rocks That Form On The Earth's Surface and Rocks That Form Underground.

C. Mountain Building

The surface of the earth is composed of rigid plates that "ride" on a molten mass beneath. These plates move and push against one another causing the rigid earth to be bowed, crushed, piled high and pulled apart creating the irregularities in what would otherwise be a smooth surface. Plates that have been locked in place until sufficient pressure builds up to spring them loose cause earthquakes. The plate movement cause the heat, pressure, and fissures which, in turn, cause volcanoes. Film: Plate Tectonics.

D. Mountain Destruction

Weathering (rock disintegration and decomposition), erosion (transpor-tation of rock debris by water, wind, and ice) and mass wasting (soil creek, slumps, landslides caused by gravity) would reduce all mountains to an almost flat featureless plain in less than twenty million years if mountain building ceased. Topographic maps, once they can be read, explain the contours caused by the erosion of streams and the mass wasting of land-slides.

E. Geology Field Trip to Black Diamond

To observe and make inferences about rocks, rock formations, stream beds, and hills, and to practice reading topographical maps.

II. Life and Its Environment

A. Latitude, Aspect, and Altitudes Effect on Light and Temperature.

Black Diamond's latitude (38° oo') and its effect on seasons, daylight, and temperature due to 23 1/2° tilt of earth's axis. Aspect's (direction of exposure) impact on light and temperature. Altitude's impact on tempera-ture due to adiabatic cooling.

B. Causes and Consequences of Wind, Evaporation, Condensation and Percipitation.

Heat's role in evaporation and evaporation's impact on sensible heat. Unequal distribution of heat as the cuase of wind. An examination of wind patterns. Winds' role in redistributing heat and moisture. Causes of condensation and precipitation. Heat and moisture, controlled by the factors discussed above, determine the climate. Consideration of the specific factors that create a Mediterranean climate in East Contra Costa County. Film: What Makes Weather.

C. Soil

The role of each of the five components of a soil. The causes and significance of a soil's layers or horizons. Climate, time, slope, and the parent rocks' roles in determining a soil. A description of, and an explanation for, the specific soils found in Black Diamond.

D. Vegetation

Climate and soil roles in determining vegetation. A description of the three types of vegetation (grassland, oak woodland, and chaparral) found in Black Diamond and an explanation as to why each is found where it is found.

E. Ecosystem

Putting it all together to see how the particular plants and animals fit into their Black Diamond environments (their niche in a habitat). Tolerance and adaptation with special focus on fire's influence. Film: Pocket Gopher.

F. Ecology Field Trip to Black Diamond

Observe soil horizons to identify soil types and posit factors contri-buting to their development. Observe the three plant communities, identify some of the common plants found in each and infer why each community is so situated. Observe and discuss microenvironments found within a large community and ecotones found where two distinct communities merge.

G. Field Trip to Oakland Museum

To observe the plant communities found within California, especially the three found in Black Diamond. To reinforce the importance of location in determining the community. To observe the animals most commonly found in each of the communities and to grasp why the animals have a niche in their habitats.

3.1 Course Content Goal, continued

III. Human Habitation

A. Native Americans, Spanish, and Mexicans

The culture of the local California Indians and the importance of particular plants and animals in shaping that culture. (An example of a hunting and gathering society). The rationale, feasibility, and impact of the Spanish missions and the Mexican ranches. (Examples of agrarian societies) Film: The Beautiful Tree - Chishkale

B. Early Anglo Settlers and the Subsequent Coal Miners (1830-1900)

Arrival of first Anglos. (John Marsh, the settlement of Pittsburg and Antioch). The discovery and development of the coal fields and the resultant growth in population and production. Film: Odyssey: People's Garbage. (An example of an industrialized society).

C. Historical Field Trip to Black Diamond

To visit the mines, the cemetary, the archaeological digs, and the introduced plants in what was Sommersville.

D. Field Trip to Bancroft Library

To read from different original sources about life in the coal mining communities in and around Black Diamond. Students will share what they read with the class so they can collectively recreate a picture of life in the 19th century mining town.

E. In the Twentieth Century

The causes and consequences of changing land-use patterns, changing life-styles, and changing political organization. Prospects for the future. The desirability of likely changes.

F. Field Trip Throughout East County

Historical sites, industrialized society's impact on the landscape, recent changes that point out future prospects.

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To utilize concepts and data from history, economics, and political science, as well as from geography, to analyze and interpret societal relationships.	1a. To be able to explain for each culture that occupied the area how the political and social relationships were influenced by the economic conditions and how the economic conditions were influenced by the geographic conditions.	III. throughout	Lecture, field trips, discussion, readings, movie: *The Beautiful Tree* - *Chishkale*
	1b. To be able to offer historical examples of many of the concepts discussed from the other social sciences.	III. throughout	Lecture, field trips, discussion, readings.

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Observation, reading, organization, and interpretation of data on both societal relationships and natural phenomena.	1. Acquire and interpret data concerning both societal relationships and natural phenomena.	I. E. II. F. III. C., D., E., F.	Observation and inference on field trips and, to a lesser degree, reading and lecture and interpretation in classroom setting.
2. Posit theories to explain both societal relationships and natural phenomena.	2. Be able to explain crucial theories that explain societal relationships and natural phenomena.	In all units.	Lecture on relevant and indispensible theories, small group discussions on field trips to try and deduce applications and subtle variations.
3. Use further data to substantiate or modify theories or to predict outcomes.	3. Gather future relevant data and show its bearing on theories.	I. E. II. F. III. C., D., E., F.	Observation and small group discussions.
4. Point out to students that the theories in the social sciences from the phenomenon in the real world rather than in the test tube and therefore, they seldon can be verified in a controlled experiment.	4. State real world phenomenon that serves as basis/example of numerous social science theories.	I. E. II. F. III. C.	Field trips, discussion.

OTHER:

3.2 Criteria Related Goals: Criterion: Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To convey the simplicity, yet subtlety, the ingenuity yet inadequacy of some of the existing theories that explain the order and diversity of the real world.	1. Experience the theories and the reality of the natural world.	I. all II. III.	Lecture, field trips, discussion, readings.
2. Explore the significance and insignificance, the potential and the limits of human activity in the area.	2. Experience accomplishments, struggles, and limitations of humankind in this area.	III. all	Lecture, field trips, discussion, readings, movie: The Beautiful Tree - Chishkale
3. Make students aware that the social sciences try to shed light on human interaction.	3. Recount how concepts from social sciences help to understand a culture and its history.	III. all	Lecture, field trips, discussion, readings.

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: *To Explore These Implications of the Knowledge of the Discipline: Values, Ethics and Future*

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Compare the impact of hunting and gathering, agrarian, and industrialized societies on the land.	1. Define and contrast the impact various people have had on East County.	III. all	Discussion generally during field trips and ungraded writing based on material introduced in lectures and readings.
2. Consider the advantages and drawbacks of the different cultures that have inhabited the area.	2. List the characteristics and personally assess the merits of each of the societies that have inhabited the area.	III. all	Discussion
3. Speculate on future development in the area and evaluate its merits.	3. List possible events/scenarios in East County development and evaluate the pros and cons of the possible alternatives.	III. E., F	Discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Promote writing skills.	1a. Write for 10-20 minutes, six or eight times, on something triggered by a reading, lecture or field trip (share but ungraded).	In all units	Write on reading, lecture, field trips
	1b. Write essays on each of three unit exams.	In all units	Write on unit exam
2. Promote reading skills.	2. Demonstrate comprehension of readings by answering questions requiring understanding of concepts.	In all units	Reading numerous articles and other handouts
3. Assess reading and writing skills and make referrals to tutors as appropriate.	3. Individual students will undertake skills development in reading and writing lab as appropriate.	I. A.	Reading and writing assessment

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. Provide concepts and data necessary in lectures and readings so students can explain field observations.	1. Identify processes and concepts that explain/account for phenomena observed in the field.	12 classroom sessions are tailored to enable students to think effectively on their own and in small groups on the field trips.	Lectures, field trips, discussions, readings
2. Develop the student's ability to make observations and draw inferences.	2. Observe and draw inferences from observations.	I. E. II. F. III. C., F	Field trips, discussions

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. Provide the opportunity for students to understand and sense the environment they probably took for granted or never noticed.	1. Experience East County intellectually and sensually.	Throughout course	Lectures, field trips, discussions, readings
2. Encourage creative activity in the students.	2a. Select laws or principles that may account for observed phenomena.	I. E. II. F. III. C., D.	Observation and discussion
	2b. Recreate history.	III. D.	Reading & Discussion
	2c. Forecast possible futures for East County	III. E., F.	Observation & Discussion
3. Introduce examples of creative thinking by geologists to explain events which we are separated from by space and time.	3. Recount laws deduced by geologist to explain phenomena.	I. all	Lectures, field trips, discussions and readings

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Compare the different cultures that have lived near Black Diamond.	1. Be able to list characteristics and differences of the groups that have lived in East Contra Costa County.	III. all	Lecture, field trips, discussions, readings, movie.
2. Present different views of the different cultures that have lived near Black Diamond and consider what factors account for the discrepencies.	2. Recount inconsistencies in the views of the different cultures that lived in East Contra Costa County.	III. all	Lecture, field trips, discussions, readings, movie.

OTHER:

4. Texts and Other Instructional Materials

Required Textbook:

None

Recommended Text(s)

None

Other Instructional Materials:

Reprints and considerable written material prepared specifically for the course.

5. Evaluation and Grading Plans

EVALUATION PLAN

There will be three unit exams consisting of multiple choice and essay questions based on the lectures, readings, field trips, lab exercises, and the ungraded writing assignments. There will also be three lab exercises completed during or after field trips. There will not be a cumulative final instead the unit 3 exam will be offered at that time.

GRADING PLAN:

The grade will be based primarily on performance of the three unit exams although participation (attendance, completion of the lab exercises and the ungraded written assignments, and contribution to discussion and small group activities will contribute about one-fourth of the grade).

6. Course Policies

The course will be offerred in three-hour time blocks to facilitate the field trips. The field practicum portion of the course (which the catalog indicates is to be announced) will occur the six days of field trips so the sessions those days will last four hours. The field trips connected with nigth classes will be taken on Saturdays.

If a student is unable to attend their class session in a given week, they may attend any of the other sessions offerred.

Tests can be made up for full credit only if the instructor is notified and a valid reason given for being absent before the hour of the scheduled exam. In other cases, those taking a make-up, will be penalized points.

COURSE OUTLINE

TIER I GENERAL EDUCATION COURSE

Course Title: Social Science 32LS

United States History

Course Author(s): Chester Case

For full and part-time social science instructors.

1. CATALOG DESCRIPTION

Title of Course:	United States History
Course Number:	Social Science 32LS
Unit Value:	3 units
Mode of Instruction:	Lecture

Brief Description of the Course:

United States History is a one semester overview of the nation's development and its relations with the Western Hemisphere and the world from pre-colonial times to the present. To give detail to the broad survey, selected topics will be taken up for close study, such as the rise and transformation of industry, the American heritage of rights and liberties, and the United States as a world power. Modes of historical inquiry and critical thinking will be employed in studying the past and present and in speculating on possible futures.

Articulation Statement:

Prerequisites: None

2. OVERVIEW and RATIONALE

Overview

This one semester course in United States History will cover a time span ranging from the pre-colonial times to the present. The course will inform learners of key events, trends, periods and persons that have influenced the development of the United States. To convey a sense of the broad sweep and continuity of United States History and at the same time to afford a close-up look at selected parts of that history, the course will feature a series of integrating, interpretive overviews interspersed between units of study on selected topics. The overview will sketch in, for example, the colonial setting, describe the westward movement, or portray the changing character of the federal government and the presidency. The units will lead learners to a close analysis of topics or periods such as the rise and transformation of industry, the American heritage of rights and liberties, or the United States' relations with the world.

Information, concepts and theories will be drawn in an intradisciplinary fashion from economics, geography and political science. The course will engage learners in a study of the modes of inquiry used by historians. Using primary and secondary source materials, learners will have the opportunity to develop skills in reading and writing, critical and imaginative thinking as they work with the essential components of history's modes of inquiry, that is, formulating questions and advancing answers, locating, organizing and evaluating evidence, analysis, interpretation and reporting. This course will ask and explore questions of causation, interpretation, motivation, continuity and discontinuity, and possible futures of historical and contemporary trends. Biography will be used to highlight periods, events or movements.

Rationale

This course in United States History invites learners to study their nation's past and present and to speculate on the future as a way to gain understanding of themselves and the society in which they live. The study of history helps establish an orientation to time and place and a frame of reference of values and world view so much needed by citizens in these modern times of conflict, confusion and rapid change. The study of history promotes an awareness, for instance, of continuities and discontinuities, causes and effects, human motivations and forces that drive change. United States History affords learners numerous opportunities to observe how the generation of knowledge effects societies and history, as for instance, in the application of scientific discoveries to technology and industry, or to observe the implications for society of ideas and beliefs such as liberty, equality, opportunity, or pluralism. Because the writing of history involves logic and systematic thinking as well as art, critical thinking and creativity, imagination and aesthetics are readily engaged.

2. OVERVIEW AND RATIONALE, continued

By using the modes of inquiry employed by historians as they inquire into the past, learners can try out strategies for evaluating evidence, solving problems, posing and answering questions, and making decisions that are potentially applicable to their own lives as individuals and citizens. By gaining a familiarity with the American past and sense of how history is written, learners should be able to judge better the assertions and persuasions of politicians, publicists, ideologues, advertisers and others who claim to tell us what the world is all about and what we ought to do. Learners ought to be able to render some semblence of sensible meaning from the chaos and confusions of information that bombards them daily. A study of history can reinforce in learners a sense of connectedness and interrelations of life and events in the history of the United States and this planet. It can lead to a clarification of personal assumptions, values and world view. A study of United States History can awaken in learners an understanding of where and how the citizen must act to influence the emergent future for themselves, their nation and the world.

3.1 Course Content Goal

The intent of this course is to introduce the following course content to the learner.

1. Overview and Orientation
   - 1.1. Goals of the course
   - 1.2. Questions to be addressed
   - 1.3. Content of the course (overview)
   - 1.4. Structure of the course
     - 1.4.1. "Big Picture" lectures
     - 1.4.2. "Close-up" topical areas
   - 1.5. Course procedures and requirements
2. Overview: to set the scene for the story of conquest and colonization of the New World by European powers, to show the distinctive character of England's American colonies and precedents to nationhood.
3. The New World, the Old World and Colonization
   - 3.1. Geographical setting
   - 3.2. Peoples and cultures of the New World
   - 3.3. European and African antecedents
   - 3.4. Patterns of colonization: Spain, England, France
   - 3.5. From colony to nation: The emergence of the United States
4. Reading and Writing Assessment
5. The Writing of History
   - 5.1. How history is written
     - 5.1.1. steps in the process of historical inquiry
     - 5.1.2. objectivity and subjectivity
     - 5.1.3. primary and secondary sources
     - 5.1.4. problems and issues in history writing
   - 5.2. Notable historians and their times
   - 5.3. What the study of history can do for you; "Everyone his/her own historian"
   - 5.4. History as an art
6. History and the Social Sciences
   - 6.1. The meaning of "intradisciplinary"
   - 6.2. Aims, scope and methods of social sciences
     - 6.2.1. history
     - 6.2.2. economics
     - 6.2.3. political science
     - 6.2.4. geography

3.1 Course Content Goal, continued

- 6.3. What is shared by the social sciences
  - 6.3.1. topics of study; human activity, social institutions and relationships
  - 6.3.2. modes of inquiry
  - 6.3.3. utilization of one another's findings

7. Overview: to describe and analyze the Westward Movement and Turner's Frontier Thesis, to show the rise of nationalism and stresses of regional conflicts, to name the units to be studied and why they were selected.

8. The Rise and Transformation of Industry

- 8.1. The Industrial Revolution Worldwide
  - 8.1.1. Industrialization; characteristics and dynamics
  - 8.1.2. Contrasts of the agricultural, traditional society and the industrialized society
  - 8.1.3. Britain's 18th century industrial revolution
  - 8.1.4. Industrialization today; developed and developing nations

- 8.2. Industrialization in the United States
  - 8.2.1. Eli Whitney and the Lowell Maidens
  - 8.2.2. Rockdale and the paradigm shift
  - 8.2.3. Post Civil War industrialization
  - 8.2.4. Science and industrialization
  - 8.2.5. Origins and characteristics of high technology
  - 8.2.6. What might come after industrialization?

- 8.3. Concommitants to Industrialization in the United States
  - 8.3.1. Urbanization
  - 8.3.2. Immigration and the immigrant
  - 8.3.3. Exploitation of resources and development of markets
  - 8.3.4. Science and technology

- 8.4. Companion Institutions to Industrialization
  - 8.4.1. Factory
  - 8.4.2. Market
  - 8.4.3. Union
  - 8.4.4. Education
  - 8.4.5. Corporation
  - 8.4.6. Family

- 8.5. Impacts of Industrialization
  - 8.5.1. Progress and poverty
  - 8.5.2. Redefinition of social roles and values; alignment of social classes
  - 8.5.3. Resistance and rejection of industrialization and industrialism; politics, communitarianism, arts and crafts
  - 8.5.4. Alternative futures to industrialism

- 8.6. Conclusions and Synthesis

3.1 Course Content Goal, continued

9. Overview: to sketch in the Civil War, its origins, conduct and aftermath, to point out turning points in U.S. history, to show the changing social order, and to point to the impending changes brought by the twentieth century.

10. Rights and Liberties: An American Heritage

10.1 Rights and Liberties

10.1.1. Definitions
10.1.2. Bases for rights and liberties

10.1.2.1. cultural and traditional
10.1.2.2. constitution and law
10.1.2.3. philosophical; ethics and values

10.1.3. Issues and Problems of Pluralism and Dissent

10.1.3.1. tensions between the parts and the whole
10.1.3.2. balancing diversity and unity
10.1.3.3. dissent in a democratic society

10.2 Freedom of Speech

10.2.1. Philosophical and constitutional bases
10.2.2. Red Scares and McCarthyism
10.2.3. Effects of present and future communications Practices and technology
10.2.4. Issues and problems

10.3. Rights of Women in the United States

10.3.1. Women in history; contrasting views
10.3.2. Changing roles and status
10.3.3. Advocates and opponents of women's rights; episodes and events
10.3.4. Contemporary situation and future possibilities
10.3.5. Issues and problems

10.4. The Civit Rights Movement

10.4.1. Constitutional bases; provisions and amendments
10.4.2. Historic efforts to secure civil rights
10.4.3. The Civil Rights Movement

10.4.3.1. the setting
10.4.3.2. leaders and their goals
10.4.3.3. events
10.4.3.4. legislation and Supreme Court decisions

10.4.4. Contemporary situation
10.4.5. Issues and problems
10.4.6. Possible futures

10.5. Conclusions and synthesis

3.1 Course Content Goal, continued

11. Overview: on the theme of accelerated social change, to include, for example, the Roaring Twenties, the Depression and the New Deal, and the impact of World War II.

12. The United States and the World

    12.1 Introduction and overview

        12.1.1. The concepts of foreign policy, diplomacy and international relations
        12.1.2. Practices, conventions and strategies of foreign policy
        12.1.3. Historic themes in United States' Foreign policy
        12.1.4. The new urgency in global problems

            12.1.4.1. the population bomb
            12.1.4.2. thermonuclear weaponry
            12.1.4.3. environmental degradation

    12.2 The United States and Asia

        12.2.1. China trade, the Hermit Kingdom and spheres of influence
        12.2.2. War in the Pacific and its aftermath
        12.2.3. Militry interventions; Korea and Viet Nam
        12.2.4. The Challenge of Japan
        12.2.5. Present issues and possible futures

    12.3. The United States in the Western Hemisphere

        12.3.1. European colonial powers and their legacies
        12.3.2. Monroe Doctrine, Manifest Destiny and Expansionism

            12.3.2.1. The Mexican War
            12.3.2.2. Spanish-American War

        12.3.3. Gunboat Diplomacy and the Big Stick Policy
        12.3.4. Good Neighbor Policy
        12.3.5. United States and Cuba
        12.3.6. United States and Middle America
        12.3.7. Present issues and possible futures

    12.4. Conclusions and synthesis

13. Overview: on continuities and changes in the presidency and federal government since the New Deal.

14. Review and Conclusions

    14.1. What the study of history can impart

        14.1.1. A mode of inquiry, a way to organize and interpret information
        14.1.2. A sense of continuity, analogy and change
        14.1.3. A sense of possibility for humankind and Spaceship Earth
        14.1.4. An awareness of the interconnectedness and interrelationships of life and events on Eart

3.1 Course Content Goal, continued

14.2. Resources for further learning

- 14.2.2. LMC courses; major, electives, general education
- 14.2.3. Media
- 14.2.4. Libraries
- 14.2.5. Historical monuments, restorations, museums

15. Overview: Looking Back and Looking Ahead; Where Have We Been and Where Might We Be Going?

3.2 Criteria Related Goals: Criterion: Intradisciplinary

Criterion stated in goal form: To Teach the Intradisciplinary Elements of the Intradisciplinary Family of Courses

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. Explain the term intradisciplinary	1a. List and describe the social sciences; economics, political science, geography	1a. 6.2.	1a. Lecture and discussion
	1b. Define the term, "intradisciplinary"	1b. 6.1.	1b. Lecture and discussion
2. Show how the social science disciplines contribute to one another	2a. Tell how the social sciences contribute to one another	2a. 6.3.	2a. Lecture and discussion
	2b. Identify what is in common among social sciences	2b. 6.3. and throughout 3., 8., 10., 11.	2b. Lecture and discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Modes of Inquiry

Criterion stated in goal form: To Teach the Mode(s) of Inquiry Indigenous to the Discipline

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To familiarize the learner with the basic steps in the historical mode of inquiry: 1. awareness of problem; questions 2. reflection, review of information 3. formulation of tentative answer 4. gather, organize, evaluate, interpret information 5. test tentative answer 6. conclusion; generalize	1a. List and describe steps in historical mode of inquiry	1a. 5.	1a. Lecture, readings, discussion Writing exercises
	1b. Given a "kit" of historical materials, to write a history using historical mode of inquiry	1b. 8., 10., or 12.	1b. Demonstration and in-class workshop on use of sources, organization and interpretation of materials, writing
2. To show how and why historical interpretations can vary from age to age and/or from historian to historian	2a. Read, compare and contrast several works on the same topic and offer ideas on the differences and similarities, e.g., on women's role in history, or accounts of the U.S.-Mexico War.	2a. Throughout 10.3., 12.2.	2a. Demonstration and exercises in critical analysis; close reading of selected works. Discussion and essay writing
3. Encourage the learner to use historical mode of inquiry in his/her own life	3a. Offer possible applications of historical mode of inquiry	3a. Throughout 14.	3a. Lecture, discussion

OTHER:

3.2 Criteria Related Goals: Criterion: Implications of Knowledge

Criterion stated in goal form: To Explore These Implications of the Knowledge of the Discipline; Values, Ethics and Future

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials[1]
1. To show how values and ethical positions influence historical events and developments	1. Identify and describe values or ethical positions embedded in selected historical accounts and hypothesize on their influence	1. 5.1., 8.1., 8.5., 9., 10.1.3., 10.3., 12.3.	1. Lecture, discussion, readings, formative writing, essay
2. To show how the values of an historian will influence her/his historical writing	2. Given historical writings, search out and identify evidences of influence by values and/or ethics	2. Throughout, especially 3., 5., 8.5., 10.3, 12.3.	2. Readings, analysis, discussion, formative writing
3. To illustrate the impact of knowledge on history, e.g., scientific knowledge on technology and industry	3a. Recognize, discuss and offer generalizations on the connections between industrialization and the Scientific Revolution	3a. 8.	3a. Demonstration, exercises, close reading and discussion
	3b. Formulate generalizations on the connection between the generation of knowledge and historical events	3b. Throughout 5., 8.,15.	3b. Discussion, exercises, writing

OTHER:

3.2 **Criteria Related Goals:** **Criterion:** Aesthetics of Knowledge

Criterion stated in goal form: To Teach About the Aesthetic Qualities of the Knowledge of the Discipline

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To show how history through "art" can invite one to travel via imagination in time to experience and learn from the events and lives of other people in other places in other epochs	1a. Identify and express similarities and differences in their lives and times with those of others	1a. Throughout	1a. Discussion, role play, imaginative writing, projection of oneself to other times and places, exercises
2. To introduce historical works selected to exemplify aesthetic qualities	2. To experience, reflect upon and discuss aesthetic qualities such as imagery, evocativeness, style	2. Throughout, especially 5.4., 8.2., 8.5., 9., 14.1.	2. Lecture, discussion, readings
3. To present history in media other than writing such as film, literature, or visual arts	3. To experience and respond orally or in writing to historical interpretations conveyed in film, literature, or visual arts	3. Throughout	3. Viewing, discussing selected works of history in modes other than writing, expressive writing
4. To encourage the learner to experience the joy of independent, imaginative and interpretive thinking in being "his/her own historian"	4. To react, orally or in writing, to experiences in thinking through historical "puzzles" and in "doing" history	4. 5., 5., 10., 12.	4. Discussion, expressive writing

OTHER:

3.2 Criteria Related Goals: Criterion: Reading and Writing in the Learning Process

Criterion stated in goal form: To Provide Opportunities for Learners to Develop Higher Cognitive Skills Through Reading and Writing

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
1. To promote reading skills as for learning tools	1a. Demonstrate skill in using reading strategies as tools for learning	1a. Throughout	1a. In-class workshops and demonstrations, exercises, application and feedback using reading materials of the course
	1b. Demonstrate skills in discerning the main ideas of written works, of judging arguments, or varying speed in reading, and retention building strategies	1b. Throughout	1b. Similar to above
2. To promote writing skills as tools for learning	2a. Demonstrate skills in writing in the expository and essay styles	2a. Throughout	2a. In-class workshops and demonstrations; essay for each unit of study in various styles
	2b. Demonstrate skill in using writing to gather ideas, to organize information, to express ideas, and to aid retention	2b. Throughout	Frequent in-class writing such as formative writing, expressive, listing descriptive, analytical organizing
3. To encourage the development of skill in notemaking	3. Demonstrate skill in making notes from lectures	3. 2., 7., 9., 11., 13.	3. Demonstration, exercises, feedback and practice

OTHER:

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To introduce aspects of effective thinking and provide practice for their application to historical materials.	1a. Evaluate an argument or thesis on dimensions such as logic, evidence, assumptions, bias, stereotypic thinking, ethnocentrism, determinism	1a. Throughout, 5., 14.1.	1a. In-class workshops, exercises, demonstrations, practice and applications with feedback: lecture. Discussion, learner self-rating, group work, formative and expressive writing, close, analytical reading
	1b. Recognize and evaluate the effects in historical interpretations such as aspects as logical fallacy, ambiguity, special pleading, relativism, analogy, metaphor, inductive and deductive reasoning, hypothesis	1b. Throughout, 5., 14.1.	1b. Similar to above
	1c. Critically examine and evaluate one's own writing, recognize and repair shortcomings	1c. Throughout	1c. Similar to above
2. Promote attitudes and traits conducive to effective thinking, such as: to have a questioning, skeptical attitude, persistence, have a willingness to be open-minded and flexible but not gullible, to forestall premature closure on conclusions, to tolerate amgiguity, use intuition and guessing, and take risks	2a. Discuss the effects and nature of the attitudes and traits introduced and evaluate one's own "profile" on these deimensions	2a. Throughout 5., 14.1.	2a. Similar to above
	2b. Reflect and assess one's own use of intuition and guessing and risk taking	2b. Throughout	2b. Similar to above

3.2 Criteria Related Goals: Criterion: Critical and Effective Thinking

Criterion stated in goal form: To Provide Opportunities for Learners to Enhance Their Effectiveness in Thinking

SUB-GOALS	OBJECTIVES	CONTENT	INSTRUCTIONAL
(What the course intends) to do.	(Objectiv: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	(Refer to Course Outline)	Procedures/Materials
3. To encourage independence in thinking	3a. Define and discuss characteristics of independent thinking	3a. Throughout	3a. Similar to 1a.
	3b. Tell what inhibits and/or encourages independent thinking	3b. Throughout	3b. Similar to above
	3c. Recognize and discuss examples of independent thinking in historical works	3c. Throughout	3c. Similar to above
	3d. Reflect and assess one's own approaches to independent thinking	3d. Throughout	3d. Similar to above

OTHER:

3.2 Criteria Related Goals: Criterion: Creativity

Criterion stated in goal form: To Introduce to Learners Creative Processes and Examples of Human Creativity

SUB-GOALS (What the course intends) to do.	OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.	CONTENT (Refer to Course Outline)	INSTRUCTIONAL Procedures/Materials
1. To introduce examples of creativity by historians in their writing and thinking	1a. Experience the historian's recreation of an epoch in words	1a. 3., 8.3. 10.4.	1a. Readings, lecture, discussion, expressive writing
	1b. Consider the "grand thesis" as a work of historian's creativity, e.g., The Frontier Thesis	1b. 5., 7., 8.2.2.	1b. Lecture, readings, discussion
2. To point out instances of creative activity in various historical times and places	2a. Recognize and discuss the creative activity and products in political philosophy, inventions, literature, organizations	2a. Throughout	2a. Readings, lecture, discussion, media
3. Encourage in the learner creative activity	3a. Use imagination to sketch in "blank spots" in historical accounts	3a. 5., 8., 10., 12.	3a. Discussion, in-class workships, exercises, brainstorming in writing and in groups
	3b. Forecast possible futures	3b. 8.5.4., 10.4.6., 12.3.7., 13., 15.	3b. Similar to above

OTHER:

3.2 Criteria Related Goals: Criterion: Pluralism

Criterion stated in goal form: To Encourage the Learner to Consider the Variety of Perspectives, Experiences and Persuasions that have an Impact on Society

SUB-GOALS (What the course intends) to do.		OBJECTIVES (Objective: what the learner) should know, be able to do, experience, as a result of taking the course, i.e., knowledge, skills, values, ethics.		CONTENT (Refer to Course Outline)		INSTRUCTIONAL Procedures/Materials
1.	Introduce the concept of pluralism and study it in historical times and settings	1a.	Define pluralism, cite historical instances that illustrate issues of pluralism.	1a.	10.1.3., 10.2. 10.3., 10.4.	1a. Lecture, discussion, readings
		1b.	list and evaluate arguments for and against pluralism as public policy and a societal value	1b.	10.5.	1b. Discussion, debate, essay writing
2.	Show how persons and groups other than those of the dominant group contributed to United States	2.	Recount examples of contributions of women and minority groups and individuals	2.	2.10, 15.	2. Lecture, discussion, readings Writing assignment
3.	To introduce the history and issues of dissent in the United States	3.	Describe dissent, give examples, advance and evaluate arguments for and against it	3.	10., especially 10.1.3.	3. Lecture, discussion, debate, readings, writing

OTHER:

3.3 Other Goals and Objectives

GOALS	OBJECTIVES
1. To encourage learners to think in terms of the future as well as the past and present.	1a. To trace developments from the past into the present and forecasts of possible futures.
	1b. To show an awareness of the concerns and techniques of future researchers.
2. To show, through analysis of historical periods, the interconnectedness and mutual influences of lives and events on the planet.	2a. To recognize and use imagery, metaphor and models that convey the sense of interconnectedness.
	2b. To recount examples of interconnectedness.
3. To encourage learners to become active learners capable of applying their learning to their own lives.	3. To describe and assess ways of applying and integrating learning into one's own life.
4. To introduce and explicate the historian's connotation of the concept world view ("zeitgeist") and relate it to individuals in today's world.	4a. Discuss and illustrate the concept world view and recognize the varying connotations, e.g., historian, psychologist, philosopher.
	4b. To explore and evaluate his/her own world view.

6. Course Policies

At the beginning of a semester, assessment will be made of each learner's reading and writing skills for purposes of referral to developmental labs in reading and/or writing, arranging for tutorial assistance, or making individual arrangements for skill development.

Because much of the course involves in-class participation by the learner in the learning process, regular attendance is required.

4. Texts and Other Instructional Materials

Required Textbook:

To be selected

Recommended Text(s)

To be selected

Other Instructional Materials:

Historical documents

Journal articles

Primary sources

Contemporary media

Film

Literature

5. Evaluation and Grading Plans

EVALUATION PLAN

There will be frequent evaluations of student work. Evaluation will include written work, and as appropriate, objective sampling for content mastery. There will be a steady effort to provide swift feedback. Learners will have options for re-testing and re-writing in order to apply feedback. A final examination will be designed as a summary and synthesis exercise. Each unit (3) will have an essay component.

Extra credit will be available for certain kinds of reading, activities, reports.

GRADING PLAN:

The grading plan, for example, would have components, weights, and a scale for determining letter grade equivalent for cummulative point scores like the following:

1. Basis for points:

1.1.	attendance (18 @ .5/class)	9
1.2.	unit examinations (3 @ 25 points each)	75
1.3.	assignments, exercises	25
1.4.	quizzes	26
1.5.	final examination	25
		160
1.6.	extra credit	15
	total possible	175

2. Letter grade scale (based on 160 points)

100% - 90% = A

89% - 80% = B

79% - 70% = C

69% - 60% = D

59% and below = F

3. TIER II COURSE OUTLINE

Humanistic Studies 2LS

An Ethical Inquiry into a Societal Issue

LOS MEDANOS COLLEGE
HUMANISTIC STUDIES 2LS

COURSE OUTLINE

COURSE DESCRIPTION

An Inquiry Into Societal Issues 3 units

3 hour lecture, 1 hour field practicum

This course is designed to investigate five or six selected societal issues toward understanding the dimensions of the problems, the possible options for resolution and the ethical choices open to those seeking solution to these problems. An interdisciplinary approach will be used in exploring these societal isues. A method of "ethical inquiry" will be applied to the societal issues. The course will also focus on techniques of independent study and each student will be obliged to engage in a project of independent study.

This course is required for all students seeking an Associate in Arts or Associate in Science degree.

OVERVIEW

In Humanistic Studies 2LS, important contemporary societal issues are studied in an interdisciplinary fashion and following an ethical inquiry approach. Each year a committee of faculty, students and administrators selects several key issues to join the standing issues--equality and justice by race and by sex--for study.

In this course, methods, materials and content are combined to promote to the learner a means as well as a motivation for a continuing, informed concern for issues facing society. While the issues of the course are given full attention on a cognitive level, the process of addressing issues--in fact, of learning how to learn--receives continuing and systematic attention.

Ethical inquiry in this course denotes both a strategy of teaching/learning and a hope; it is a strategy for engaging the learners in the statement and analysis of ethical positions and moral reasoning, and a hope that the modelling of ethical inquiry and experience in moral reasoning will move the learner to greater personal awareness of the ethical component of all human experience.

Counterpoint to the study of issues by the class is the study of a topic of personal interest and selection by the individual learner. The Self-Directed Study Component of the course requires the learner to select a course related issue, set study goals, design and carry out a plan for investigation, and to report findings. Thus, the learner acquires and practices the skills of enduring value for subsequent courses and for a lifetime of learning.

It is an interdisciplinary course, drawing from disciplines whose concepts, generalizations, and knowledge prove useful for promoting self-understanding, expanding awareness of the complex interactions of the environment, social and natural, and exploring societal issues.

RATIONALE

(For a full development of the rationale for the Los Medanos College General Education Program, see Collins and Drexel, General Education: A Community College Model, Community College Press, LMC, 1977.

Humanistic Studies 2LS (as well as the follow-on courses in the 3LS series) is intended to meet a central need in the general education of the citizen--the need for integration, interpretation, analysis and for inquiry into ethical implications of societal issues. Unlike other general education programs that follow the "breadth" approach, the Los Medanos College program attempts to synthesize and concentrate by means of the 2LS and 3LS courses. Persuading the College to take this approach is the fact that few learners will have opportunities in the course of a postsecondary education to discuss large scale, important social issues in a guided systematic fashion. This is done in a forum-like setting in the company of other students who in their aggregate represent something of a cross section of the community, so that the ethical aspects of the learner's own views as well as the views of others are elicited and considered.

Another central need the course aspires to meet is the need for learners to learn how to learn. The design of the course is shaped by a need for the learner to experience the connectedness of knowledge in such a way that learners may gain confidence and skill in taking the responsibility of informing themselves on the issues of their day and of analyzing alternative solutions.

GOALS

1. To introduce for close study, crucial issues confronting contemporary society.
2. To guide the learner in the acquisition and development of skills and motivation in self-directed learning.
3. To promote in the learner an awareness of the ethical aspects of societal issues and their solutions.
4. To help the learner recognize that solutions to complex societal problems require the integration of knowledge from the various fields of study.
5. To encourage the learner to articulate, understand, and evaluate their own ethical positions.
6. To provide the opportunity for the learner to experience the ethical views and moral reasoning of others.

OBJECTIVES

1. To be able to describe a societal issue under study, to adduce pertinent information, state and evaluate alternative solutions to problems dwelling in the issue, and to explore ethical implications.

3. To be able to demonstrate an awareness of the significance of ethics and of moral reasoning.

3. To be able to apply skills related to self-directed learning; defining a topic and goals, making and carrying out plans for investigation, and reporting findings.

CONTENT

The content of the course can be described in two major components, (1) the societal issues, and (2) the self-directed study component.

1. Societal Issues for 1982-83.

   Content of the units is not detailed here, because the list of issues is up for revision annually. For detailed outlines of the units make inquiry to the Dean of Humanistic Studies.

   1.1. Unit I: Energy and the Environment
   1.2. Unit II: Limits to Growth
   1.3. Unit III: Threat of Nuclear War
   1.4. Unit IV: Equality and Justice by Sex
   1.5. Unit V: Equality and Justice by Race
   1.6. Unit VI: Search for Values

2. Self-Directed Study Component

   2.1. Orientation to self-directed study, self assessment of preferences in learning style and learning skills.
   2.2. Defining and narrowing down a topic into a question suitable for investigation.
   2.3. Designing a study plan, including goals, procedures and objectives.
   2.4. Strategies and techniques for gathering information, such as:

      2.4.1. using the Learning Resource Center, locating information in the community
      2.4.2. the interview; design and conduct
      2.4.3. the questionnaire; design and application

   2.5. The research paper; a three-part final product reporting the information using the same general approach employed throughout the course: what is the problem and its dimensions; options for solutions; student's conclusion and an ethical analysis

METHODS

1. The examination of a societal issue will include these methods:
    - 1.1. Introduction of the issue
    - 1.2. Ascertaining the problem
    - 1.3. Developing an information base; relating the problem to the individual
    - 1.4. Discussion of the problem
    - 1.5. Generating alternative solutions or options and their consequences
    - 1.6. Eliciting and evaluating ethical implications
    - 1.7. Exercises in ethical inquiry and moral reasoning
2. Teaching/learning methods used in examining a societal issue may include:
    - 2.1. Lecture
    - 2.2. Lecture/discussion
    - 2.3. Critical analysis of materials
    - 2.4. Media
    - 2.5. Speakers
    - 2.6. Simulation and/or gaming
    - 2.7. Group processes; discussion, problem solving, brainstorming
    - 2.8. Role playing
    - 2.9. Panel discussion
    - 2.10. Debate
3. Teaching/learning methods for promoting self-directed learning skills and motivation will include:
    - 3.1. Workshops featuring presentation, demonstration and application of skills such as locating information, interviewing, questionnaire design, goal setting, planning strategies
    - 3.2. Consultation with the instructor on study plan
    - 3.3. Consultation with reference librarian
    - 3.4. Referral to skill development courses and materials
    - 3.5. Feedback on plans and reporting
    - 3.6. Writing a research paper

MATERIALS

1. Readings
    - 1.1 Texts
        - 1.1.1. Energy and Environment: Four Energy Crises
        - 1.1.2. Global 2000 Report to the President
    - 1.2. Syllabus; a selection of timely and challenging articles from a variety of mass media sources; 10-20 articles per unit; syllabus is revised yearly.

2. Media
    - 2.1. Audio tapes
    - 2.2. Video recordings
    - 2.3. Films

3. Speakers

4. Community resources; events, objects, persons, collections, processes appropriate for supplying information for self-directed study projects.

EVALUATION

A point system will be used.

1. Points will be earned by:
    - 1.1. Unit exams
    - 1.2. Final exam
    - 1.3. Quizzes
    - 1.4. Assignments
    - 1.5. Self-directed study project
        - 1.5.1. in-process assignments
        - 1.5.2. final product (three parts)
    - 1.6. Attendance

2. Grades will be assigned on the basis of this percentage distribution:

100 - 90 = A

89 - 80 = B

79 - 65 = C

64 - 50 = D

dd: revised 10-82

4. TIER III COURSE OUTLINES

4.1 Guidelines for the 3LS Series

An Ethical Inquiry into a Societal Issue

GUIDELINES FOR 3LS DEVELOPMENT/APPROVAL

1. Instructor will have completed the Humanistic Studies 2LS professional development seminar.

2. The instructor will need some experience in handling interdisciplinary teaching, the ethical inquiry approach and Student Directed Study projects.

The instructor can gain this experience by one(or a combination) of the following:
   A. Teaching Humanistic Studies 2LS;
   B. Sitting in on at least one complete unit of a 2LS class;
   C. Working with a veteran 2LS instructor, the 2LS coordinator or the area dean on the development and implementation of the 3LS course.

3. The proposed 3LS will include SDS, ethical inquiry and as many interdisciplinary concepts as possible. It should relate to at least one of the 2LS units.

4. A course outline will be developed in consultation with the area dean and/or 2LS coordinator.

5. The course outline will be presented to the General Education Societal Issues Committee and the area for approval.

6. Once the 3LS has been taught, it will not have to be submitted again for approval. However, a course evaluation process for 3LS involving GESIC will be developed.

4.2 Biological Science 3LS

An Ethical Inquiry into a Societal Issue: Control of Life and Death

LOS MEDANOS COLLEGE
BIOLOGICAL SCIENCE 3LS

COURSE OUTLINE

COURSE DESCRIPTION

An Ethical Inquiry Into A Societal Issue: 3 units
Control of Life and Death

Prerequisite: Humanistic Studies 2LS.

Three hour lecture. One hour Field Practicum

An intensive investigation of the social issue relating to the control of life and death. Emphasis in this course will be given to the examination of the rights and responsibilities of the individual versus that of society. The processes of ethical inquiry and self-directed study introduced in Humanistic Studies 2LS will be continued.

OVERVIEW AND RATIONALE

This course is designed to implement the second phase of the societal issue component of the General Education model. With the application of the technological advancements in science, emerging ethical dilemmas now face society. Specifically at the interface of biology and medicine the ability to control life processes is now at hand. The questions, "should we," and, "who decides," need to be addressed.

Within the issue of control of life and death five problem areas have been identified for possible exploration and evaluation. These areas are biological engineering, experimentation of human subjects, euthanasia and prolongation of life, behavior control, and limits to health care. With each of these areas, problem-solving and ethical inquiry will be utilized to examine the rights and responsibilities of the individual versus society, where appropriate customs and values of different cultures and countries will be incorporated. An opportunity will be provided for the student to investigate an aspect of one of these areas in greater depth with a self-directed study project. As a consequence of this course, it is hoped that the student will be better able to take responsibility in deciding for self in matters of control of life and death.

GOALS

1. To enhance the students abilities in self-directed learning, problem solving and ethical inquiry.
2. To increase the student's knowledge and understanding of the five problem areas from an interdisciplinary approach.

3. To explore the rights and responsibilities of the individual versus that of society in the control of life and death.
4. To develop a world view of the issue through examination of customs and values of different cultures and countries.
5. To assist the student in personal value clarification.
6. To enable the student to assess consequences of present practices and to identify directions for the future.

OBJECTIVES

The student will be able:

1. To define the problem area.
2. To search out the facts relating to the problem.
3. To determine options for each problem.
4. To discuss the outcomes of the options.
5. To analyze the underlying values of the options.
6. To recognize personal value systems.
7. To complete a S.D.S. project.

CONTENT

I. Introduction
   A. Questions
      1. What is the relationship of science, technology and society?
      2. Why and how has Bioethics emerged during the last 40 years?
      3. What is the process for ethical decision-making?

II. Biological Engineering of the Human Race
   A. Questions
      1. Should genes be tampered with?
      2. Should selective breeding be practiced in the human race?
   B. Topics
      1. Genetic research and screening, prenatal diagnosis, abortion, sterilization, cloning

III. Experimentation of Human Subjects

- A. Questions
    1. Who decides the selection of human subjects?
    2. How essential to society is experimentation?
- B. Topics
    1. Informed consent, population selection, benefit to research subjects

IV. Prolongation of Life

- A. Questions
    1. When does life end?
    2. When does the Quality of Life supercede the Sanctity of Life?
- B. Topics
    1. Definition of Death
    2. Forms of Euthanasia
    3. Life Maintenance

V. Behavioral Control

- A. Questions
    1. Can society identify what is normal behavior?
    2. Should behavior be controlled?
    3. Who exercises the power to control behavior?
- B. Topics
    1. Power: Control -vs- Freedom
       Personal liberty -vs- Public Interest
       Persuasive -vs- Coersive

VI. Health care and Delivery Systems

- A. Questions
    1. What are the limits to Health Care?
    2. Who should assume the responsibility for Health and Health Care?

B. Topics

1. Cost and Availability
2. Alternative Delivery Systems

ACTIVITIES

Lecture, seminars, group discussions, student presentation, student conference and consultation on S.D.S.

MATERIALS

Textbook to be selected. Selected Bibliography and handouts.

POLICIES

Evaluation: Student will be evaluated on the following:

Attendance	
Class participation	20%
Examinations	40%
SDS Project	40%

dz: 11-6-80

4.3 Language Arts 3LS

Freedom and Responsibility of the Mass Media

LOS MEDANOS COLLEGE
LANGUAGE ARTS 3LS: An Ethical Inquiry into a Selected Societal Issue

COURSE OUTLINE

COURSE DESCRIPTION

Language Arts 3LS: Freedom and Responsibility of the Mass Media

Prerequisite: Humanistic Studies 2LS 3 units

3 hour lecture, 1 hour field practicum

An intensive investigation of one societal issue falling primarily within the intradisciplinary scope of Language Arts. The subtitle (Freedom and Responsibility of the Mass Media) names the societal issue to be studied. The method of ethical inquiry taught in Humanistic Studies 2LS will be developed further and employed by students in the in-depth investigation of the societal issue. Also, the techniques of independent study learned in Humanistic Studies 2LS will be elaborated upon refined and applied to some sub-topic of the societal issue of particular interest to the student doing the study.

OVERVIEW AND RATIONALE

In Language Arts 3LS an important cotemporary societal issue is studied in an interdisciplinary fashion using an ethical inquiry approach.

The mass media are very important in American society. We are media freaks. Though the mass media pervade our daily lives, most people are unaware of what they do for us--and to us. Our habits and daily routines, perceptions of ourselves, our society and the world, our value systems--all are influenced significantly by mass communication. An understanding of the media and related ethical dilemmas is crucial for both the individual and society.

This course will present cognitive material about the media, but also stress the process of addressing the issue which is used in Humanistic Studies 2LS: Is there a problem? What is the nature of the problem? What options do individuals and the society have in dealing with the problem? What are the ethical considerations involved? Included in this course is a Self-Directed Study which requires the learner to pursue in-depth an issue related to the larger issue being addressed in 3LS. LA 3LS is an interdisciplinary course--it draws from a number of disciplines which relate to the role of the mass media in American society.

GOALS

1. To introduce for close study the crucial issue of freedom and responsibility of the mass media.

2. To help the learner refine skills involved in self-directed learning through the Student-Directed Study.

3. To introduce in the learner an awareness of the ethical aspects of this societal issue and potential solutions.

4. To help the learner realize that solutions to this complex societal problem require the integration of knowledge from various fields of study.

5. To encourage the learner to articulate, understand and evaluate his/her own ethical positions related to this issue.

6. To expose the learner to the ethical views and moral reasoning of others.

OBJECTIVES

1. To be able to describe the issue of freedom and responsibility of the mass media and relate the major issue to the sub-issues being studied; to adduce pertinent information, state and evlauate alternative solutions to the problems; to explore the ethical implications.

2. To be able to demonstrate an awareness of the significance of ethical and moral reasoning.

3. To be able to apply skills related to self-directed learning; defining a topic and goals, making and carrying out plans for investigation; reporting finding clearly; addressing the ethical issues involved.

CONTENT

The following sub-issues will be studied:

Media violence and society;
Children and mass media;
Sexism and racism and the media;
Mass media ownership;
Political processes and the mass media;
Government regulation;
Censorship and freedom of expression;
The watchdog role of the press;
Media and the judicial system;
Role of advertising;
What can be done about the media.

MATERIALS

Text: Voelker and Voelker, Mass Media: Forces in Our Society.
New York: Hartcourt, Brace and Jovanovich, 1978.

Other reading: The college will provide additional articles for most units.

Media: Videotapes and films will be used.

SDS: Students will be assisted in locating resources and information for their projects.

EVALUATION

Students will be evaluated according to a point system:

Midterm examination: 40 points;

Self-Directed Study: 75 points;

Final exam: 60 points;

Attendance and other assignments: 50 points;

(total: 225 points)

Grades will be assigned according to this percentage distribution:

100-90, A; 89-80, B; 79-65, C; 64-50, D; below 50, F.

4.4 Physical Science 3LS

Science and Human Values

LOS MEDANOS COLLEGE
PHYSICAL SCIENCE 3LS

COURSE OUTLINE

COURSE DESCRIPTION

Science and Human Values 3 units

3 hours lecture, 1 hour field

Prerequisite: Humanistic Studies 2LS

An exploration of the question of how science should rightfully be used by society in accordance with the highest human values. The method of ethical inquiry of Humanistic Studies 2LS will be employed to investigate the use of science as a tool for 1) uncovering the nature of man and his place in the cosmos and 2) for improving the lot of mankind. Interwoven in the study of these two aspects will be an in-depth consideration of the scientist as a human being with a moral responsibility to society.

OVERVIEW AND RATIONALE

Physical science 3LS is a one-semester course designed to carry forward the ethical study of societal issues initiated in Humanistic Studies 2LS. The course will explore in greater depth aspects of two issues from HUMST 2LS: 1) the search for values and 2) energy. The search for true values is related intimately to man's understandings of who he is and how he fits into the grand scheme of things. The course will focus first, therefore, on the whole question of man's place in the cosmos, as an example of "pure" knowledge that science seeks to uncover. It will deal with such questions as how the scientific view of creation and evolution differs from the religious or spiritual, what values are implied by each view, and which version should be taught to children in school.

It is by the application of scientific knowledge that the material lot of mankind has been uplifted. In particular, the discovery and use of certain types of energy has been crucial in this process. Potential misuses of these same energy sources now threatens both the health and even survival of mankind. As examples of applied science, then, the course will focus, second, on the use of two particular types of energy: nuclear energy and electromagnetic radiation (microwaves, x-rays, etc. as well as ordinary light).

The key to realizing and maintaining the most positive use of science is the humanity of the scientists themselves. The course will, therefore, concentrate throughout on the human beings who uncovered "pure" knowledge and those who developed its practical applications. What was their motivation? What is their role in the search for truth and values? What responsibility do they bear for the results of their research?

The approach to be followed in the source is that of ethical inquiry developed in HUMST 2LS. By lecture and classroom discussion, the instructor will present the topics of man's place in the cosmos and the uses of nuclear and electromagnetic energy by formulating the ethical issues involved, outlining the historical background, considering possible solutions to the problem and finally inviting the student to commit himself or herself to a particular point of view. Each student will be required to use the same method to make an in-depth study of some aspect of the topics discussed or of an alternative topic in pure or applied science.

GOALS AND OBJECTIVES

1. To define the problem of the split between science and human values as an important ethical issue;
2. To develop an awareness of the nature and process of science;
3. To develop an understanding of man's place in the cosmos as explained by science, religion, and other metaphysical approaches;
4. To develop an understanding as to how the current scientific picture of man's place in the cosmos has evolved over time;
5. To outline the life history and character of one scientific, religious, or spiritual figure who has offered explanations of creation;
6. To articulate the relationship between one's world view and belief about man's place and role in the cosmos and one's sense of values and meaning;
7. To make a commitment as to which version of creation and evolution one believes and which version should be taught to children in school;
8. To define the different types of nuclear and electromagnetic energy and how they are used by society;
9. To develop an awareness of how each type of nuclear and electromagnetic energy has been discovered and brought to practical application;
10. To sketch the life history and character of one significant figure central to the development of nuclear or electromagnetic energy;
11. To define the ethical issues involved in the use of nuclear and electromagnetic energy should be used;
12. To evaluate possible solutions to the problem of how nuclear and electromagnetic energy should be used;
13. To explore the role of the individual human being in uncovering scientific knowledge and bringing it to practical application;
14. To master the process of ethical inquiry and apply it to any insure within pure or applied science;
15. To pinpoint within any subject the ethical issues involved;
16. To construct a list of specific recommendations as to how science education and the practice of science in general can be "humanized"' and
17. To offer a personal statement as to how science should be rightfully used by society and how this rightful use can be brought about.

CONTENT

- I. The need for a reconciliation of science and human values
  - A. Definition of Terms: Science, Technology Human Values
  - B. The "Two Cultures"
  - C. The dimension and possible consequences of the split
  - D. Ethical imperative of securing the rightful place of science in society
- II. Pure Science as a Tool for Self-Knowledge
  - A. Definition of pure science
  - B. Man's place in the cosmos: an example of pure science
    - 1. Relationship between values and one's conception of man's place and purpose in the universe
    - 2. Historical Background
      - a. Ancient beliefs, East and West
      - b. Development of modern scientific conception
        - (1) Copernicus to Newton
        - (2) Darwin and the 19th Century
        - (3) The 20th Century: the Big Bang, nucleosynthesis, and the origin of life
    - 3. Religious, mythical, and other conceptions of creation and evolution
    - 4. A modern spiritual explanation and possible synthesis of science and religion
    - 5. Ethical questions
      - a. How does an individual "choose" which version of creation to believe in?
      - b. Which version should be taught to children in school?
    - 6. The role of individual human beings in uncovering knowledge about man's place in the universe
- III. Applied Science: The Challenge to Technology of Improving the Lot of Mankind
  - A. The Problem of technology in general: positive and negative uses
  - B. Three examples: Electromagnetic energy, nuclear energy and the Uses of Space
    - 1. Electromagnetic energy
      - a. Definition of electromagnetic radiation and its uses
      - b. Historical background
      - c. Life history and character of those who discovered various kinds of electromagnetic radiation

    - d. Ethical issues involved in the use of microwaves, x-rays, fluorescent light, lasers, etc.
    - e. Outline and evaluation of solutions
  - 2. Nuclear Energy
    - a. Definition of fission and fusion and their uses
    - b. Historical development of nuclear energy
    - c. Individuals involved in the making of the atomic bomb
    - d. Ethical issues involved in the use of nuclear energy
    - e. Possible solutions
  - 3. The role of the individual scientists and others in bringing electromagnetic and nuclear energy to general use
  - 4. The challenge to insure positive use of these energies
  - 5. The Uses of Space
    - a. The development of rocketry--Goddard, von Braun
    - b. Achievements of space exploration in terms of "pure knowledge"
    - c. Technological spin-offs from the space program
    - d. The present, planned program for continued use of space
    - e. Possibilities for future use
      - (1) Space colonies
      - (2) Resource base (moon asteroids)
      - (3) Terraforming planets
    - f. Potential misuse of space
    - g. Ethical issues and the challenge to use space positively
- IV. The Role and Social Responsibility of Scientists
- V. Development of specific recommendations as to how science and technology and the teaching of these subjects in school can be "humanized"
- VI. Articulation of personal opinions as to how science should be rightfully used by society and how this rightful use can be brought about

ACTIVITIES

The topics will be presented through lectures, planetarium shows and demonstrations, audio-visual presentations, classroom demonstrations, and films. Classroom discussions, involving the whole class and also small groups will be an important part of the learning experience. The student will engage in individual reading and will undertake a major research report on a topic within the broad outlines of the course content. Field trips and guest speakers will also be featured.

MATERIALS

Students will be required to purchase the following materials (the list may be changed slightly):

1. Paperback books

   Snow, C. P., The Two Cultures and a Second Look
   Bronowski, Jacob, Science and Human Values
   Jastrow, Robert, God and the Astronomers
   Miller, G. Tyler, Energy and Environment
   Ott, John, Health and Light

2. A loose-leaf notebook with dividers (for syllabus)

   Students will receive numerous handouts from the instructor which will form a syllabus for the course. Readings will be taken from the following works (among others).

   Brodeur, Paul, The Zapping of America
   Bronowski, Jacob, The Ascent of Man
   Bronowski, Jacob, The Identity of Man
   Graham, Loren, Between Science and Values
   Gribbin, John, Genesis
   Needleman, Jacob, A Sense of the Cosmos: The Encounter of Modern Science with Ancient Truth
   Sagan, Carl, Cosmos
   Schneider, Stephen and Morton, Lynne, The Primordial Bond: Exploring Connections Between Man and Nature Through the Humanities and Sciences

   Classroom presentations will include the following video material (among others):

   Programs of Cosmos: A Personal Voyage, by Carl Sagan
   The Ascent of Man, by Jacob Bronowski

EVALUATION

Students will be evaluated primarily on their ability to do the following:

1. Comprehend, summarize and respond to reading assignments or audiovisual presentations in clearly expressed, accurate-written and oral form.

2. Analyze their own and others' values inherent in suggested solutions to ethical dilemmas.

3. Undertake a major research paer on a topic of personal interest within the scope of the course subject matter.

4. Attend and participate in classroom discussions.

Grades will be given according to a point system with the following percentage breakdown:

33% - Research paper

33% - Tests, take-home essays

33% - In-class and homework assignments, attendance, class participation, supplementary reading

POLICIES

Students will be given credit for attendance and participation in class. They are expected to submit written work on time and will be docked points for late work. Tests may be made up only if a valid excuse is given to the instructor on the day of the exam. Otherwise, a substitute assignment for fewer points may be done to make-up for a missed test.

4.5 Social Science 3LS

Change: A Look to The Future

LOS MEDANOS COLLEGE
SOCIAL SCIENCE 3LS

COURSE OUTLINE

COURSE DESCRIPTION

Change: A Look to the Future 3 units

Prerequisite: Humanistic Studies 2LS

3 hour lecture

Change processes in the past and present and future outcomes are studied from an interdisciplinary, futures research perspective in the realms of values and the economy, especially human relations, work and the workplace, environment and technology. Ethical and values aspects of possible and preferred futures and changes are explored in the self-directed study undertaken by the learner.

OVERVIEW AND RATIONALE

Change. The Future. We live in a time of rapid and intense change. We see changes in values, in technology in landscape and cityscape, changes in jobs and the way people feel and value work, in social institutions, changes in knowledge and how it is used and in human consciousness. Where is change taking us? As Alvin Toffler puts it, the future is crashing in upon us. This course is intended to make a dent in the huge topic of change and the future, mostly to encourage learners to become aware of the processes of change, to be able to appraise changes in progress and to project their own versions of the future, such that the future is demystified and that a sense of control and confidence might be engendered.

No more than all the past or present can be covered in one semester, nor can all of the future be covered, but selected areas can be pondered to advantage. Possible futures related to societal issues taken up in Humanistic Studies 2TG will be considered, with the focus necessarily confined. Focus will be on values, the environment, and these aspects of economic growth; work and the workplace and technology. The course will take up questions of how change occurs, what is the nature of change and what effects it has on the individual and society, and to what futures might it lead? How futurists study the future will be considered, along with several prominent versions of the future. Learner's conceptions and feelings about change and futures will be explored, and learners will do their own study of the future on a topic of their own selection (SDS). In this, ethical and values aspects will be analyzed and evaluated.

In a time of "convulsive change" and when the "future is crashing in upon us: (Toffler), a person's education cannot be well rounded unless there is a sense of the connectedness of things and the ramifications of changes. A person needs an awareness of the magnitude and pervasiveness of change and the consequences of change. It is important and useful for a person to explore his/her feelings and beliefs about change and the future, and if possible, to develop a future consciousness that promotes a sense of positive possibilities and control on a personal as well as societal level. And very important is an assessment of the part played by values and ethics, societal and personal, in change processes and the unfolding of the future.

GOALS

1. To enhance the learner's awareness of the nature of change and change processes and the impact of change on individuals and societies.
2. To provide opportunity for learners to explore and perhaps modify their conceptualizations, feelings and beliefs about change, change processes and the future.
3. To study futurists and the ways in which they study the future.
4. To encourage imaginative and creative thinking and feeling in the contemplation of the future.
5. Study selected events of change, past and present, especially as underlie societal issues taken up in Humanistic Studies 2LS.
6. To provide the opportunity for learners to explore a topic of change of their own selection, to forecast possible futures, and to select a preferred future in the light of an ethical inquiry and study of values components.

OBJECTIVES

As a result of taking this course, learners should be able to:

1. Express, in writing and/or orally, personal feelings and conceptualizations of change, change processes and the future.
2. Tell what futurists are, and how they study the future.
3. Use tools of futures research such as trend extrapolation, scenarios, or future mapping to forecast possible futures.
4. Show imaginative as well as analytic thinking in discussion and in writing.
5. Identify and evaluate the ethical aspects of change and possible futures.
6. Recount and analyze episodes or accounts of change and identify casual factors, identify trends, and forecast possible futures.
7. Conduct a study of a change situation, identify trends, forecast futures, and on the basis of values and ethical consideration select a preferred future.

COURSE CONTENT AND CALENDAR

Week	
1	Introduction to the course
2- 6	1. Several views of change: Toffler, others 2. An unfinished story of change; the history of Pittsburg 3. Example of change and its effect 4. Future studies; perspectives and approaches
6	Midterm Examination
7-12	Changes in Progress 1. Changes in the society; emphasis on the economy, work and the workplace 2. Changes in values; individual and societal, human relations 3. Discussion and analysis; The Third Wave
12	Midterm Examination
13-18	Possible Futures 1. Work and the workplace 2. Human relations and values 3. Other (depending on S.D.S. topics)
18	Final examination

INSTRUCTIONAL METHODS

1. Lecture and lecture/discussion

2. Simulations games and role playing

3. Brainstorming, problem solving, and other creative exercises

4. Forecasting, trend extrapolation, scenario writing, future mapping, cross impact matrix analysis, and other applications of futures study methods

MATERIALS

Required reading (available at the bookstore)

1. Toffler, Alvin, The Third Wave

2. Articles: Business Week, "America's Restructured Economy," and "New Industrial Relations"

3. Collection of readings (purchase at bookstore) and handouts along the way

Strongly recommended materials:

1. Toffler, Alvin, Future Shock
2. Callenbach, Ernest, Ecotopia
3. Kroeber, Theodora, Ishi in Two Worlds
4. Burke. James, Connections
5. Harmon, Willis, An Incomplete Guide to the Future
6. Hoffer, Eric, The Ordeal of Change
7. Nisbet, Robert A., Social Change and History, Aspects of the Western Theory of Development
8. Futurist (magazine)
9. O'Neil, Gerald, 2081
10. Ferguson, Marilyn, The Aquarian Conspiracy
11. Yankelovich, Daniel, New Rules

Recommended:

1. Science fiction, stories, novels and film
2. Utopian novels
3. Institutional forecasts and projections
4. "Think tank" publications

SELF-DIRECTED STUDY

The SDS will be similar to the Humanistic Studies 2LS SDS in intent and method, only there will be adaptations for this course and subject matter. A topic of interest and concern will be selected from the two main areas of concentration of this course, e.g., work and the workplace, and human relations. Other topics may be selected with the instructor's consent. Essentially, to research and write the paper, a learner will:

1. Select a topic that is do-able, relevant to the topic, inter-disciplinary, has an ethical angle, AND is interesting.
2. Define and describe the topic, talk about the changes that are going on, and identify trends.
3. Forecast possible futures, determine which are the probable futures, and decide which are the preferable futures.
4. Tell, on the basis of values and ethical implications, why and how the preferable future was selected.

Calendar and point system for the SDS:

WEEK/DUE	ACTIVITY/PRODUCT	POINT VALUE	CUMULATIVE POINTS
2	Written statement of first ideas on topic	1	/1
4	Statement of topic and assessment of do-ability (written)	3	/4
6	Preliminary outline	3	/7
8	Detailed outline	8	/15
12	Part-One - Introduction Discussion of topic, trends	25	/40
16-17	Part Two - Futures Possible, Probable and Preferred Ethical Inquiry	20	/60

SCORING AND GRADING SYSTEM

Points will be assigned as follows:

1. Attendance; 18 meetings at .5 each = 9 /9
2. Midterm examinations; two at 25 each = 50 /59
3. Final examination; one at 25 points = 25 /84
4. Exercises and quizzes = 26 /110
5. Self-Directed Study = 60 /170

Extra credit up to 10 points may be earned by doing and reporting on readings, field observations interviews, creative enterprises (fiction, film, scenarios), or designing games and/or simluations.

Letter grades will be assigned according to points accumulated according to percentages, which for the above point distribition, would be:

180 - 153 = A = 90% or above of 170

152 - 135 = B = 80% or above of 170

134 - 119 = C = 70% or above of 170

118 - 102 = D = 60% or above of 170

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